

DCR-TRV145E/TRV147E/TRV245E/TRV250E

RMT-814

SERVICE MANUAL

Ver 1.0 2003.02

Revision History



AEP Model
UK Model
East European Model
North European Model
DCR-TRV145E/TRV147E/TRV245E/
TRV250E

E Model
DCR-TRV147E/TRV250E

Australian Model
DCR-TRV147E/TRV250E

Chinese Model
DCR-TRV250E

Tourist Model
DCR-TRV250E

M2200 MECHANISM

Photo: DCR-TRV250E

Link

SPECIFICATIONS	BLOCK DIAGRAMS	PRINTED WIRING BOARDS
SERVICE NOTE	FRAME SCHEMATIC DIAGRAMS	REPAIR PARTS LIST
DISASSEMBLY	SCHEMATIC DIAGRAMS	

- For ADJUSTMENTS (SECTION 6), refer to SERVICE MANUAL, ADJ (987621151.pdf).
- For INSTRUCTION MANUAL, refer to SERVICE MANUAL, LEVEL 1 (987621141.pdf).
- For MECHANISM ADJUSTMENTS, refer to the "8mm Video MECHANICAL ADJUSTMENT MANUAL IX [M2000 MECHANISM]" (9-929-861-11).
- **Reference No. search on printed wiring boards is available.**
- **Table for differences of function of each model.**
- **When the machine needs to be repaired, make sure to follow the items of "LCD TYPE CHECK".**
- **HELP: Sheet attachment positions and procedures of processing the flexible boards/harnesses are shown.**

Digital 8 DIGITAL VIDEO CAMERA RECORDER

SONY®



Digital Handycam



SPECIFICATIONS

Video camera recorder

System

Video recording system

2 rotary heads

Helical scanning system

Audio recording system

Rotary heads, PCM system

Quantization: 12 bits (Fs 32 kHz,

stereo 1, stereo 2), 16 bits

(Fs 48 kHz, stereo)

Video signal

PAL colour, CCIR standards

Usable cassette

8 mm video format cassette

Recording/playback time

(using 90 min. Hi8/Digital8 video cassette)

SP mode: 1 hour

LP mode: 1 hour and 30 minutes

Fastforward/rewind time

(using 90 min. Hi8/Digital8 video cassette)

Approx. 5 min.

Viewfinder

Electric Viewfinder (monochrome)

Image device

3 mm (1/6 type) CCD

(Charge Coupled Device)

Gross: Approx. 540 000 pixels

Effective: Approx. 350 000 pixels

Lens

Combined power zoom lens

Filter diameter 37 mm (1 7/16 in.)

DCR-TRV145E/TRV147E:

20× (Optical), 560× (Digital)

DCR-TRV245E/TRV250E:

20× (Optical), 700× (Digital)

Focal length

f=2.5 – 50 mm (1/8 - 2 in.)

When converted to a 35 mm

still camera

f=42 – 840 mm (1 11/16 - 33 1/8 in.)

Colour temperature

Auto

Minimum illumination

4 lx (lux) (F 1.6)

0 lx (lux) (in the NightShot mode)*

* Objects unable to be seen due to the dark can be shot with infrared lighting.

Input/output connectors

S video jack

Output

4-pin mini DIN

Luminance signal: 1 Vp-p,

75 Ω (ohms), unbalanced

Chrominance signal: 0.3 Vp-p,

75 Ω (ohms), unbalanced

Audio/Video jack

Output

AV MINIJACK,

VIDEO:

1 Vp-p, 75 Ω (ohms),

unbalanced, sync negative

AUDIO:

327 mV, (at output impedance more than 47 kΩ (kilohms))

Output impedance with less than

2.2 kΩ (kilohms)

Stereo minijack (ø 3.5 mm)

DV jack

DCR-TRV147E/TRV250E:

Input/Output

4-pin connector

DCR-TRV145E/TRV245E:

Output

4-pin connector

USB jack

DCR-TRV245E/TRV250E:

Mini-B

LCD screen

Picture

6.2 cm (2.5 type)

50.3 × 37.4 mm

(2 × 1 1/2 in.)

Total dot number

123 200 (560 × 220)

General

Power requirements

7.2 V (Rechargeable battery pack)

8.4 V (AC adaptor)

Average power consumption (when using the battery pack)

During camera recording using

LCD

3.5 W

Viewfinder

2.7 W

Operating temperature

0 °C to 40 °C (32 °F to 104 °F)

Recommended charging temperature

10 °C to 30 °C (50 °F to 86 °F)

Storage temperature

–20 °C to +60 °C (–4 °F to +140 °F)

Dimensions (approx.)

89 × 101 × 199 mm

(3 5/8 × 4 × 7 7/8 in.) (w/h/d)

Mass (approx.)

810 g (1 lb 12 oz)

main unit only

950 g (2 lb 1 oz)

including the rechargeable battery

pack NP-FM30, Hi8/Digital8 cassette,

lens cap and shoulder strap

AC adaptor

Power requirements

100 - 240 V AC, 50/60 Hz

Current consumption

0.35 – 0.18 A

Power consumption

18 W

Output voltage

DC OUT: 8.4 V, 1.5 A in the operating mode

Operating temperature

0 °C to 40 °C (32 °F to 104 °F)

Storage temperature

–20 °C to +60 °C (–4 °F to +140 °F)

Dimensions (approx.)

56 × 31 × 100 mm

(2 1/4 × 1 1/4 × 4 in.) (w/h/d)

excluding projecting parts

Mass (approx.)

190 g (6.7 oz)

excluding mains lead

Rechargeable battery pack

Maximum output voltage

DC 8.4 V

Output voltage

DC 7.2 V

Capacity

5.0 Wh (700 mAh)

Operating temperature

0 °C to 40 °C (32 °F to 104 °F)

Dimensions (approx.)

38.2 × 20.5 × 55.6 mm

(1 9/16 × 13/16 × 2 1/4 in.)

(w/h/d)

Mass (approx.)

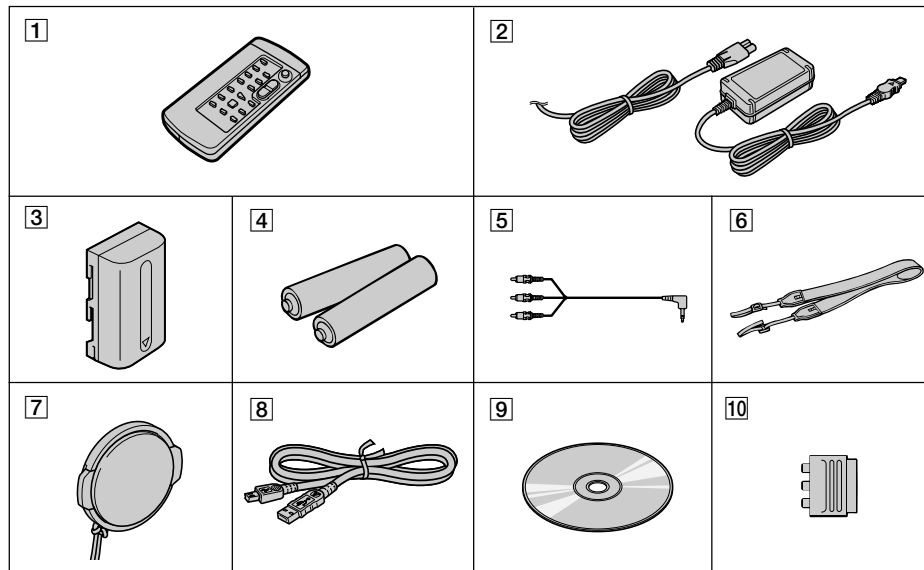
65 g (2.3 oz)

Type

Lithium ion

Design and specifications are subject to change without notice.

Supplied accessories



- | | |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>1 Wireless Remote Commander (1)
DCR-TRV245E / TRV250E</p> <p>2 AC-L15A/L15B AC Adaptor (1), Power cord (1)</p> <p>3 NP-FM30 Rechargeable Battery Pack (1)</p> <p>4 Size AA (R6) battery for Remote Commander (2)
DCR-TRV245E / TRV250E</p> | <p>5 A/V connecting cable (1)</p> <p>6 Shoulder strap (1)</p> <p>7 Lens cap (1)</p> <p>8 USB cable (1)
DCR-TRV245E / TRV250E</p> <p>9 CD-ROM (SPVD-010 USB Driver) (1)
DCR-TRV245E / TRV250E</p> <p>10 21-pin adaptor (1)
AEP, UK, EE, NE</p> |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

Table for differences of function

Model	DCR-TRV145E	DCR-TRV147E	DCR-TRV245E	DCR-TRV250E	Remark
Destination	AEP, UK, EE, NE	AEP, UK, EE, NE, E, AUS	AEP, UK, EE, NE	AEP, UK, EE, NE, E, AUS, CH, JE	
Remote commander	×	×	○	○	
Digital zoom	560x	560x	700x	700x	
Steady shot	×	×	○	○	
VTR Rec	×	○	×	○	○: with REC button
DV jack	DV OUT	DV IN/OUT	DV OUT	DV IN/OUT	
USB jack	×	×	○	○	
LCD type	Please refer to page 1-2 to discriminate the type of LCD (TYPE C or TYPE S).				

- Abbreviation

AUS : Australian model	JE : Tourist model
CH : Chinese model	NE : North European model
EE : East European model	

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK \triangle OR DOTTED LINE WITH MARK \triangle ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

SAFETY CHECK-OUT

After correcting the original service problem, perform the following safety checks before releasing the set to the customer.

1. Check the area of your repair for unsoldered or poorly-soldered connections. Check the entire board surface for solder splashes and bridges.
2. Check the interboard wiring to ensure that no wires are "pinched" or contact high-wattage resistors.
3. Look for unauthorized replacement parts, particularly transistors, that were installed during a previous repair. Point them out to the customer and recommend their replacement.
4. Look for parts which, through functioning, show obvious signs of deterioration. Point them out to the customer and recommend their replacement.
5. Check the B+ voltage to see it is at the values specified.
6. Flexible Circuit Board Repairing
 - Keep the temperature of the soldering iron around 270°C during repairing.
 - Do not touch the soldering iron on the same conductor of the circuit board (within 3 times).
 - Be careful not to apply force on the conductor when soldering or unsoldering.

Unleaded solder

Boards requiring use of unleaded solder are printed with the lead-free mark (LF) indicating the solder contains no lead.

(Caution: Some printed circuit boards may not come printed with the lead free mark due to their particular size.)



: LEAD FREE MARK

Unleaded solder has the following characteristics.

- Unleaded solder melts at a temperature about 40°C higher than ordinary solder.

Ordinary soldering irons can be used but the iron tip has to be applied to the solder joint for a slightly longer time.

Soldering irons using a temperature regulator should be set to about 350°C.

Caution: The printed pattern (copper foil) may peel away if the heated tip is applied for too long, so be careful!

- Strong viscosity

Unleaded solder is more viscous (sticky, less prone to flow) than ordinary solder so use caution not to let solder bridges occur such as on IC pins, etc.

- Usable with ordinary solder

It is best to use only unleaded solder but unleaded solder may also be added to ordinary solder.

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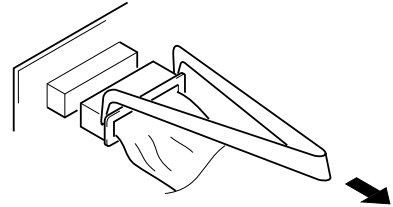
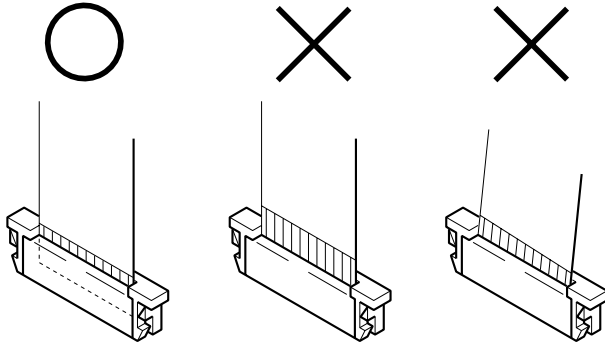


SECTION 1 SERVICE NOTE

1-1. NOTE FOR REPAIR

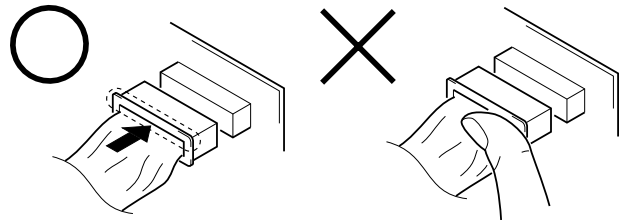
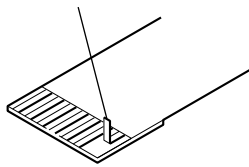
Make sure that the flat cable and flexible board are not cracked or bent at the terminal.
Do not insert the cable insufficiently nor crookedly.

When remove a connector, don't pull at wire of connector.
It is possible that a wire is snapped.



When installing a connector, don't press down at wire of connector.
It is possible that a wire is snapped.

Cut and remove the part of gilt which comes off at the point.
(Be careful or some pieces of gilt may be left inside)



1-2. POWER SUPPLY DURING REPAIRS

In this unit, about 10 seconds after power is supplied to the battery terminal using the regulated power supply (8.4V), the power is shut off so that the unit cannot operate.

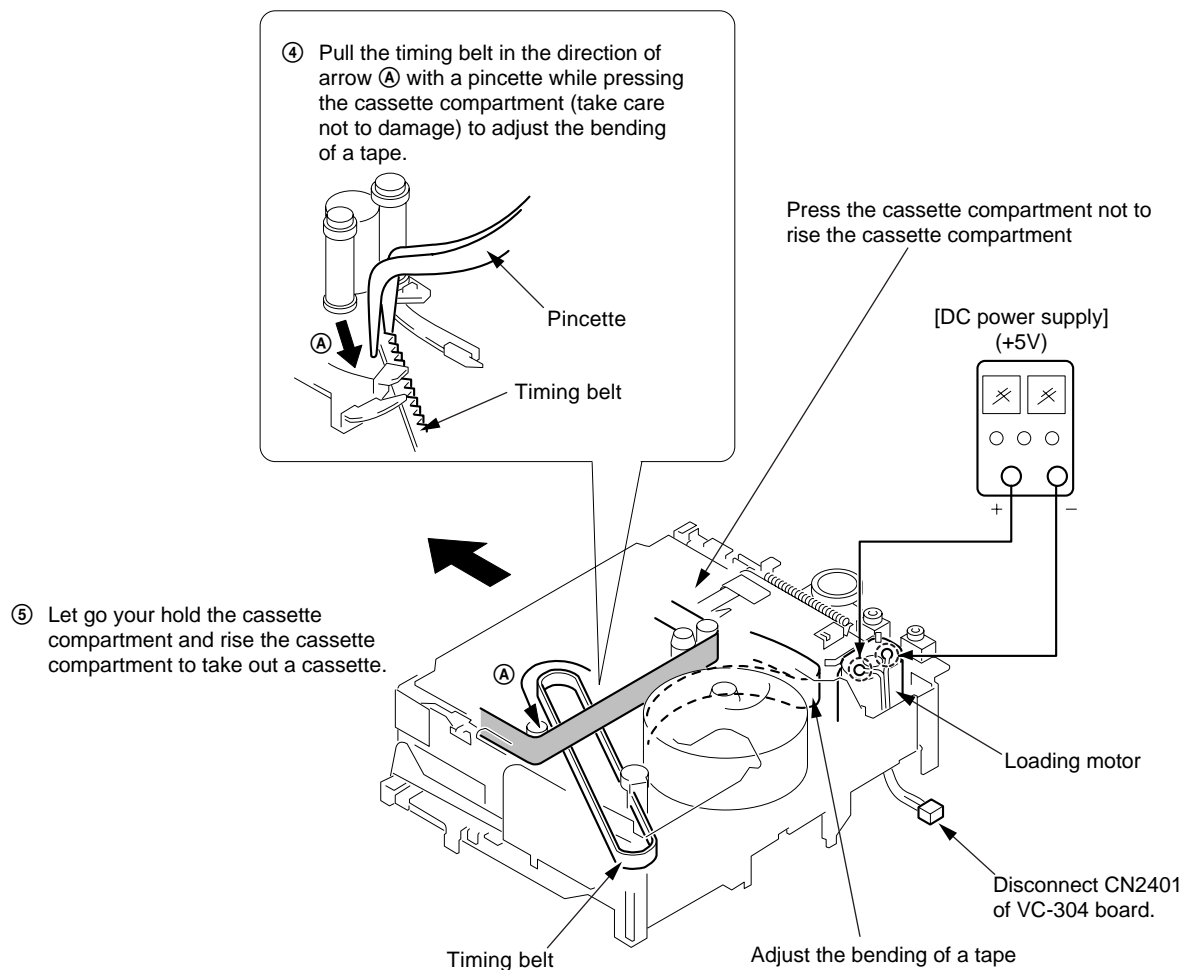
The following method is available to prevent this.

Method 1.

Use the AC power adaptor (AC-L10, AC-VQ800 etc.).

1-3. TO TAKE OUT A CASSETTE WHEN NOT EJECT (FORCE EJECT)

- ① Refer to “SECTION 2 DISASSEMBLY” to remove the mechanism deck block.
- ② Disconnect CN2401 (2P) of VC-304 board.
- ③ Add +5V from the DC POWER SUPPLY and unload with a pressing the cassette compartment.



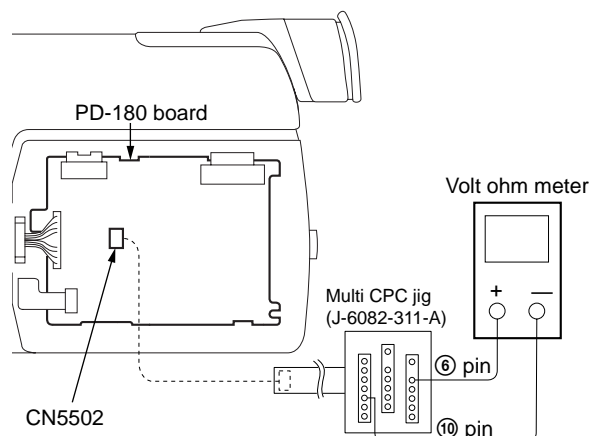
1-4. LCD TYPE CHECK

By measuring the resistor value between Pin ⑥ of CN5502 and Pin ⑩ of CN5502 on PD-180 board, the type of LCD can be discriminated.

Note: About PD-180 board and LCD module, discriminate LCD type on the machine, and replace the same type.

PD-180 board CN5502

Resistor value	LCD type	PD board
2.2 k Ω	TYPE S	PD-180 (TYPE S)
3.3 k Ω	TYPE C	PD-180 (TYPE C)

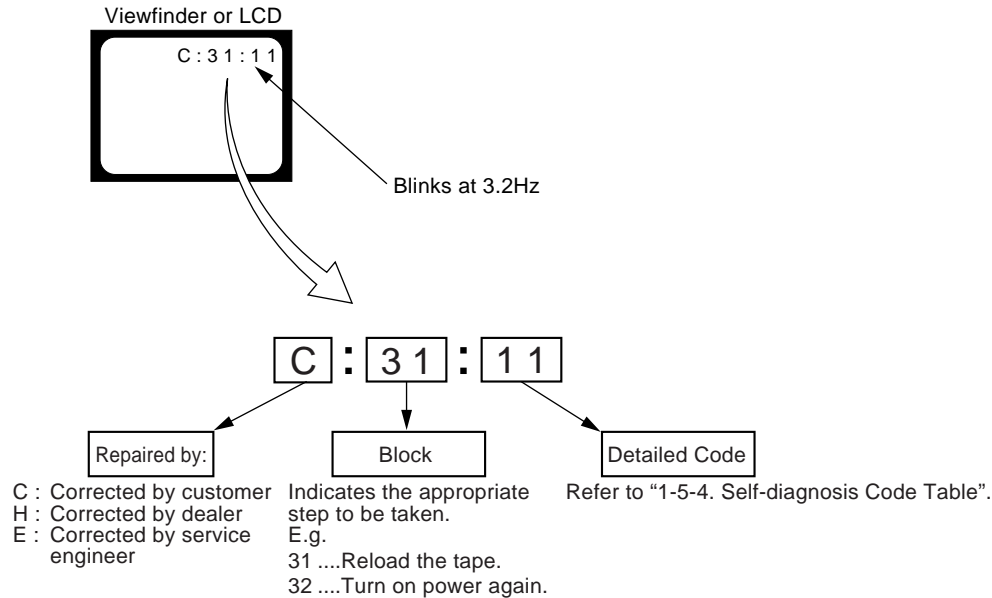


1-5. SELF-DIAGNOSIS FUNCTION

1-5-1. Self-diagnosis Function

When problems occur while the unit is operating, the self-diagnosis function starts working, and displays on the viewfinder or LCD what to do. This function consists of two display; self-diagnosis display and service mode display.

Details of the self-diagnosis functions are provided in the Instruction manual.

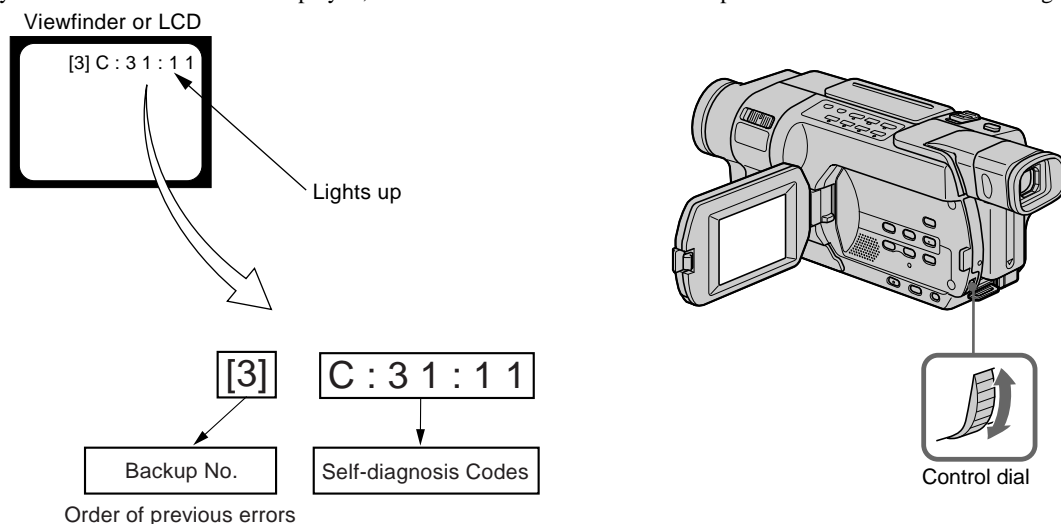


1-5-3. Service Mode Display

The service mode display shows up to six self-diagnosis codes shown in the past.

1. Display Method

While pressing the "STOP" key, set the switch from OFF to "VCR or PLAYER", and continue pressing the "STOP" key for 5 seconds continuously. The service mode will be displayed, and the counter will show the backup No. and the 5-character self-diagnosis codes.



2. Switching of Backup No.

By rotating the control dial, past self-diagnosis codes will be shown in order. The backup No. in the [] indicates the order in which the problem occurred. (If the number of problems which occurred is less than 6, only the number of problems which occurred will be shown.)

[1] : Occurred first time [3] : Occurred third time [5] : Occurred fifth time
[2] : Occurred second time [4] : Occurred fourth time [6] : Occurred the last time

3. End of Display

Turning OFF the power supply will end the service mode display.

Note: The "self-diagnosis display" data will be backed up by the lithium battery (CONTROL SWITCH BLOCK (CF-3000): BT001). When removing the cabinet (R) (removing the VC-304 board CN1007), the "self-diagnosis display" data will be lost by initialization.

1-5-4. Self-diagnosis Code Table

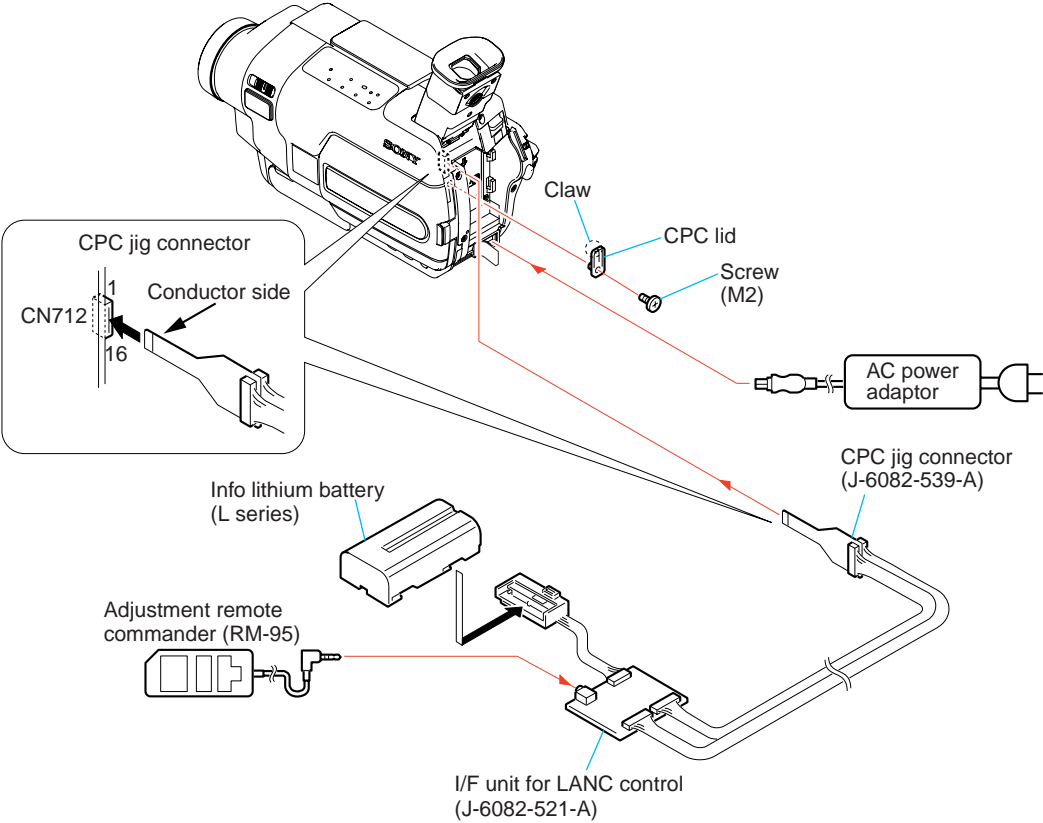
Repaired by:	Self-diagnosis Code		Symptom/State	Correction
	Block Function	Detailed Code		
C	0 4	0 0	Non-standard battery is used.	Use the InfoLITHIUM battery.
C	2 1	0 0	Condensation.	Remove the cassette, and insert it again after one hour.
C	2 2	0 0	Video head is dirty.	Clean with the optional cleaning cassette.
C	3 1	1 0	LOAD direction. Loading does not complete within specified time	Load the tape again, and perform operations from the beginning.
C	3 1	1 1	UNLOAD direction. Loading does not complete within specified time	Load the tape again, and perform operations from the beginning.
C	3 1	2 0	T reel side tape slacking when unloading.	Load the tape again, and perform operations from the beginning.
C	3 1	2 1	S reel side tape slacking when unloading.	Load the tape again, and perform operations from the beginning.
C	3 1	2 2	T reel fault.	Load the tape again, and perform operations from the beginning.
C	3 1	2 3	S reel fault.	Load the tape again, and perform operations from the beginning.
C	3 1	3 0	FG fault when starting capstan.	Load the tape again, and perform operations from the beginning.
C	3 1	3 1	FG fault during normal capstan operations.	Load the tape again, and perform operations from the beginning.
C	3 1	4 0	FG fault when starting drum.	Load the tape again, and perform operations from the beginning.
C	3 1	4 1	PG fault when starting drum.	Load the tape again, and perform operations from the beginning.
C	3 1	4 2	FG fault during normal drum operations.	Load the tape again, and perform operations from the beginning.
C	3 1	4 3	PG fault during normal drum operations.	Load the tape again, and perform operations from the beginning.
C	3 1	4 4	Phase fault during normal drum operations.	Load the tape again, and perform operations from the beginning.
C	3 2	1 0	LOAD direction loading motor time-out.	Remove the battery or power cable, connect, and perform operations from the beginning.
C	3 2	1 1	UNLOAD direction loading motor time-out.	Remove the battery or power cable, connect, and perform operations from the beginning.
C	3 2	2 0	T reel side tape slacking when unloading.	Remove the battery or power cable, connect, and perform operations from the beginning.
C	3 2	2 1	S reel side tape slacking when unloading.	Remove the battery or power cable, connect, and perform operations from the beginning.
C	3 2	2 2	T reel fault.	Remove the battery or power cable, connect, and perform operations from the beginning.
C	3 2	2 3	S reel fault.	Remove the battery or power cable, connect, and perform operations from the beginning.
C	3 2	3 0	FG fault when starting capstan.	Remove the battery or power cable, connect, and perform operations from the beginning.
C	3 2	3 1	FG fault during normal capstan operations.	Remove the battery or power cable, connect, and perform operations from the beginning.
C	3 2	4 0	FG fault when starting drum.	Remove the battery or power cable, connect, and perform operations from the beginning.
C	3 2	4 1	PG fault when starting drum.	Remove the battery or power cable, connect, and perform operations from the beginning.
C	3 2	4 2	FG fault during normal drum operations.	Remove the battery or power cable, connect, and perform operations from the beginning.
C	3 2	4 3	PG fault during normal drum operations.	Remove the battery or power cable, connect, and perform operations from the beginning.
C	3 2	4 4	Phase fault during normal drum operations.	Remove the battery or power cable, connect, and perform operations from the beginning.

Repaired by:	Self-diagnosis Code		Symptom/State	Correction
	Block Function	Detailed Code		
E	6 1	0 0	Difficult to adjust focus (Cannot initialize focus.)	Inspect the lens block focus reset sensor (Pin ⑫ of CN1551 of VC-304 board) when focusing is performed when the control dial is rotated in the focus manual mode and the focus motor drive circuit (IC1553 of VC-304 board) when the focusing is not performed.
E	6 1	1 0	Zoom operations fault (Cannot initialize zoom lens.)	Inspect the lens block zoom reset sensor (Pin ⑬ of CN1551 of VC-304 board) when zooming is performed when the zoom switch is operated and the zoom motor drive circuit (IC1553 of VC-304 board) when zooming is not performed.
E	6 2	0 0	Steadyshot function does not work well. (With pitch angular velocity sensor output stopped.)	Inspect pitch angular velocity sensor (SE751 of SI-035 board) peripheral circuits. *1
E	6 2	0 1	Steadyshot function does not work well. (With yaw angular velocity sensor output stopped.)	Inspect yaw angular velocity sensor (SE752 of SI-035 board) peripheral circuits. *1

*1: STEADYSHOT model (DCR-TRV245E/TRV250E)

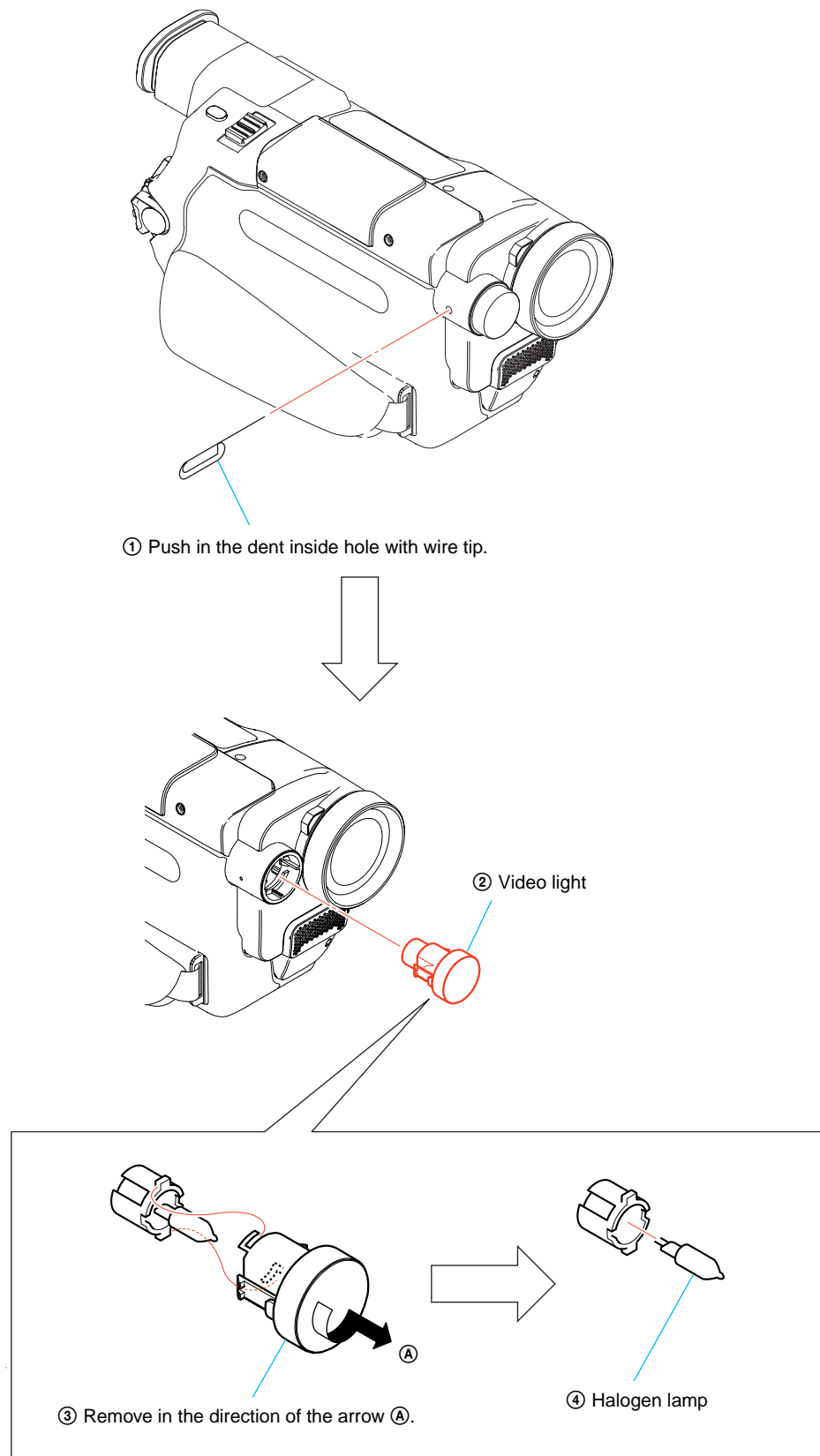
2-1

[CONNECTION OF EQUIPMENT]

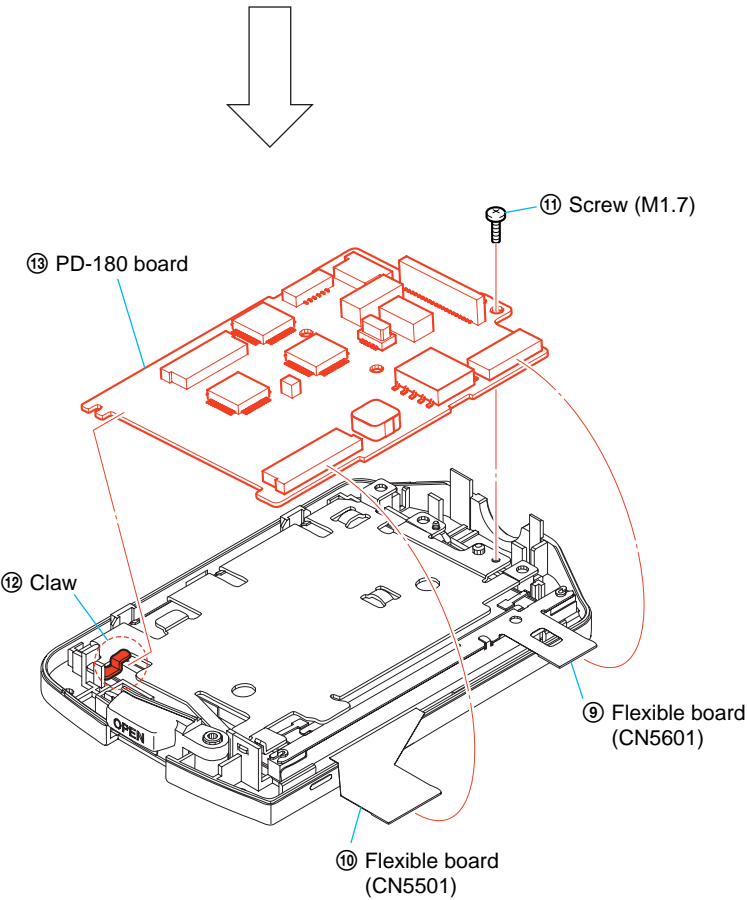
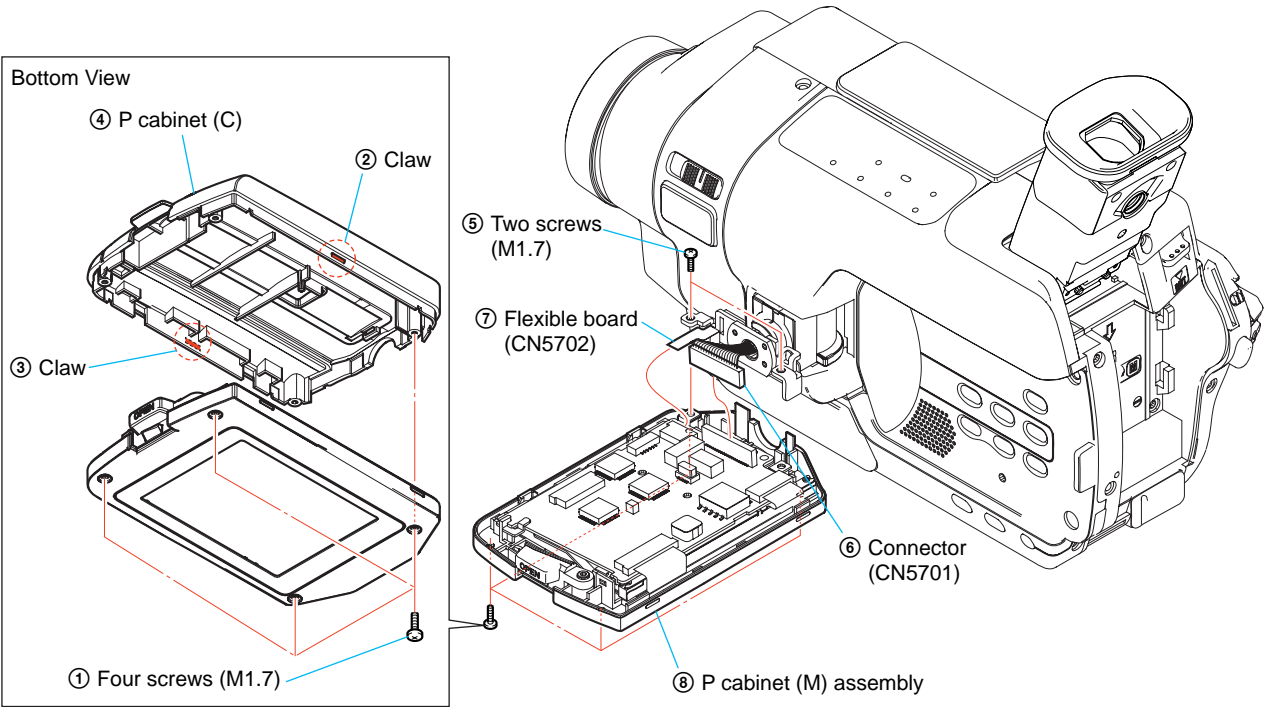


Note: Follow the disassembly procedure in the numerical order given.

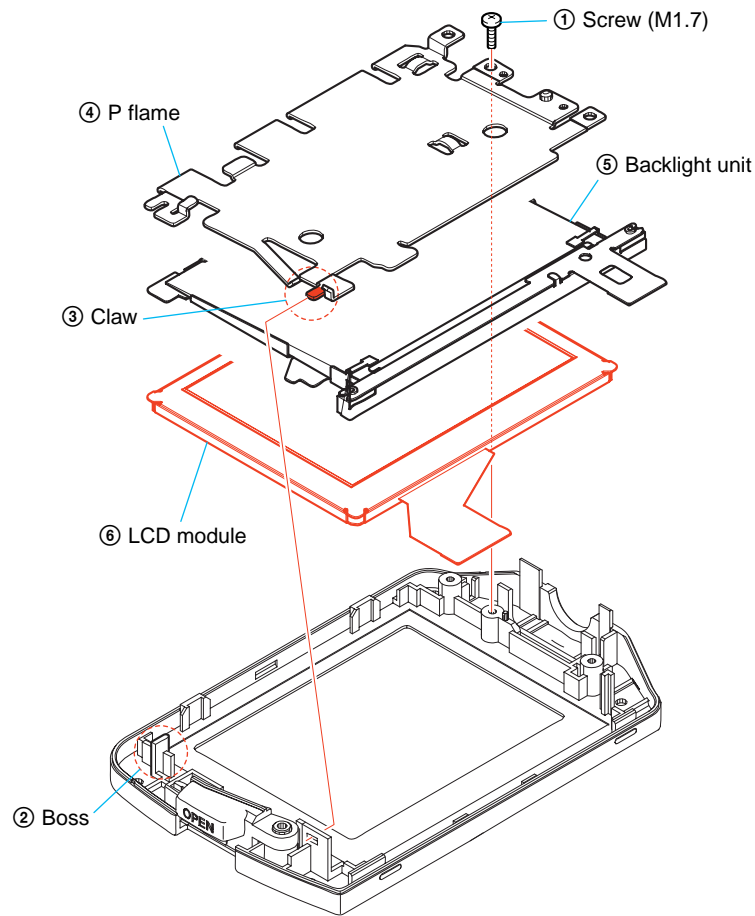
2-1. VIDEO LIGHT



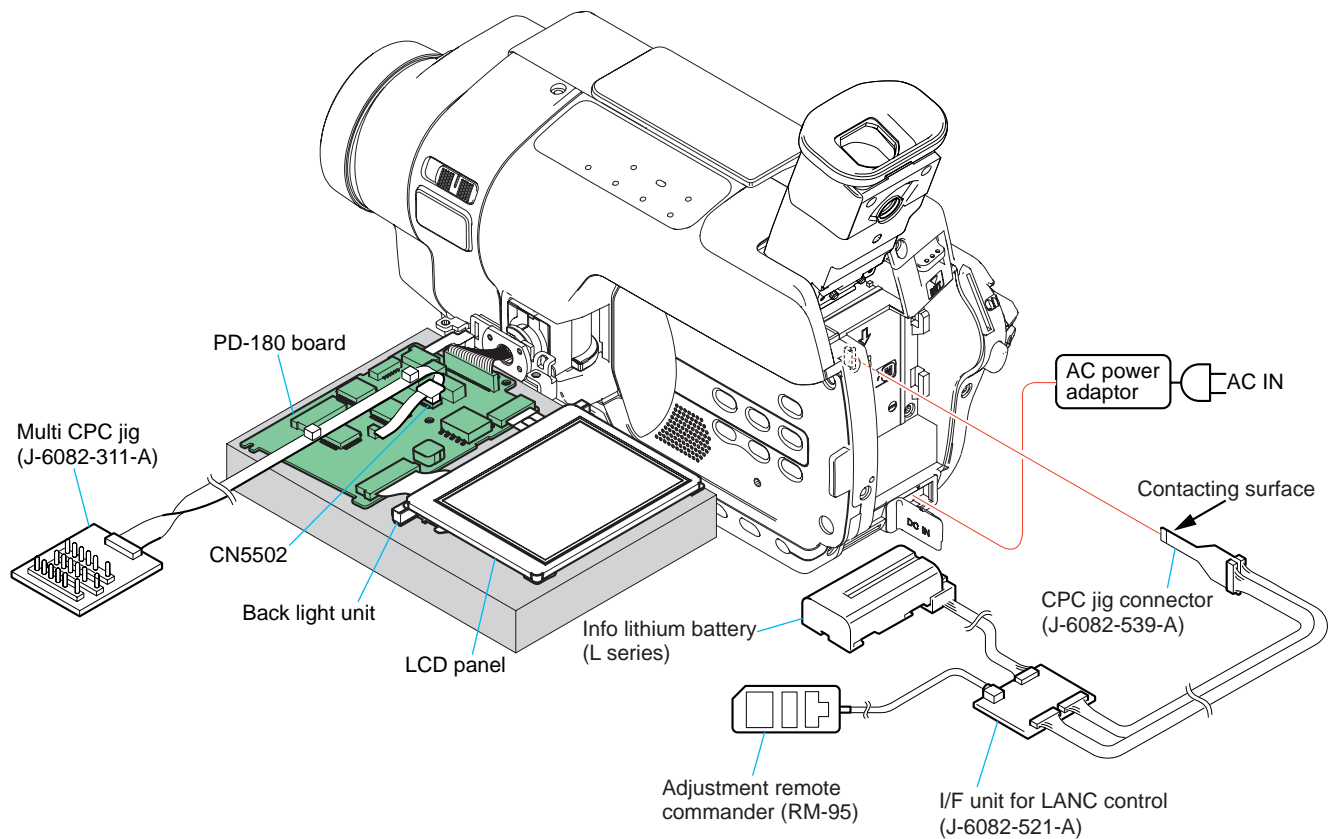
2-2. PD-180 BOARD



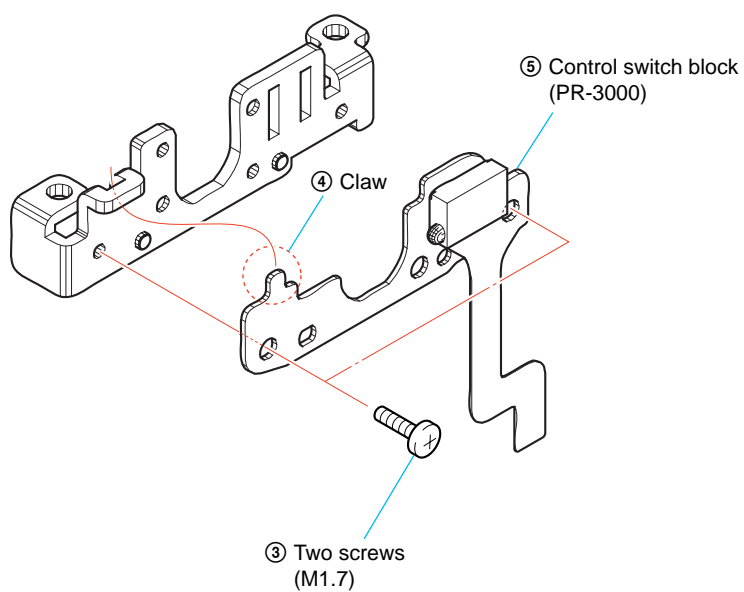
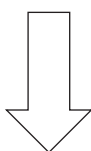
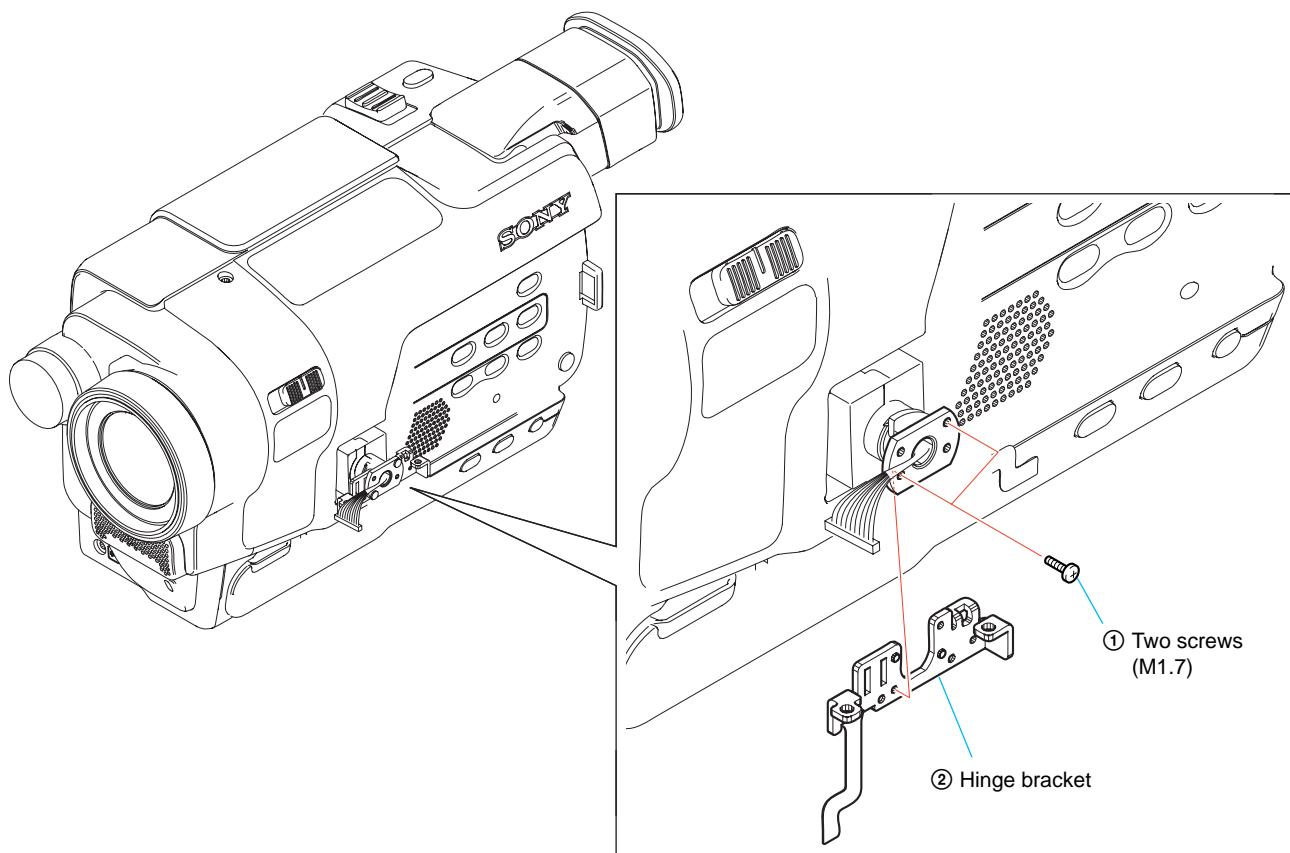
2-3. LCD MODULE



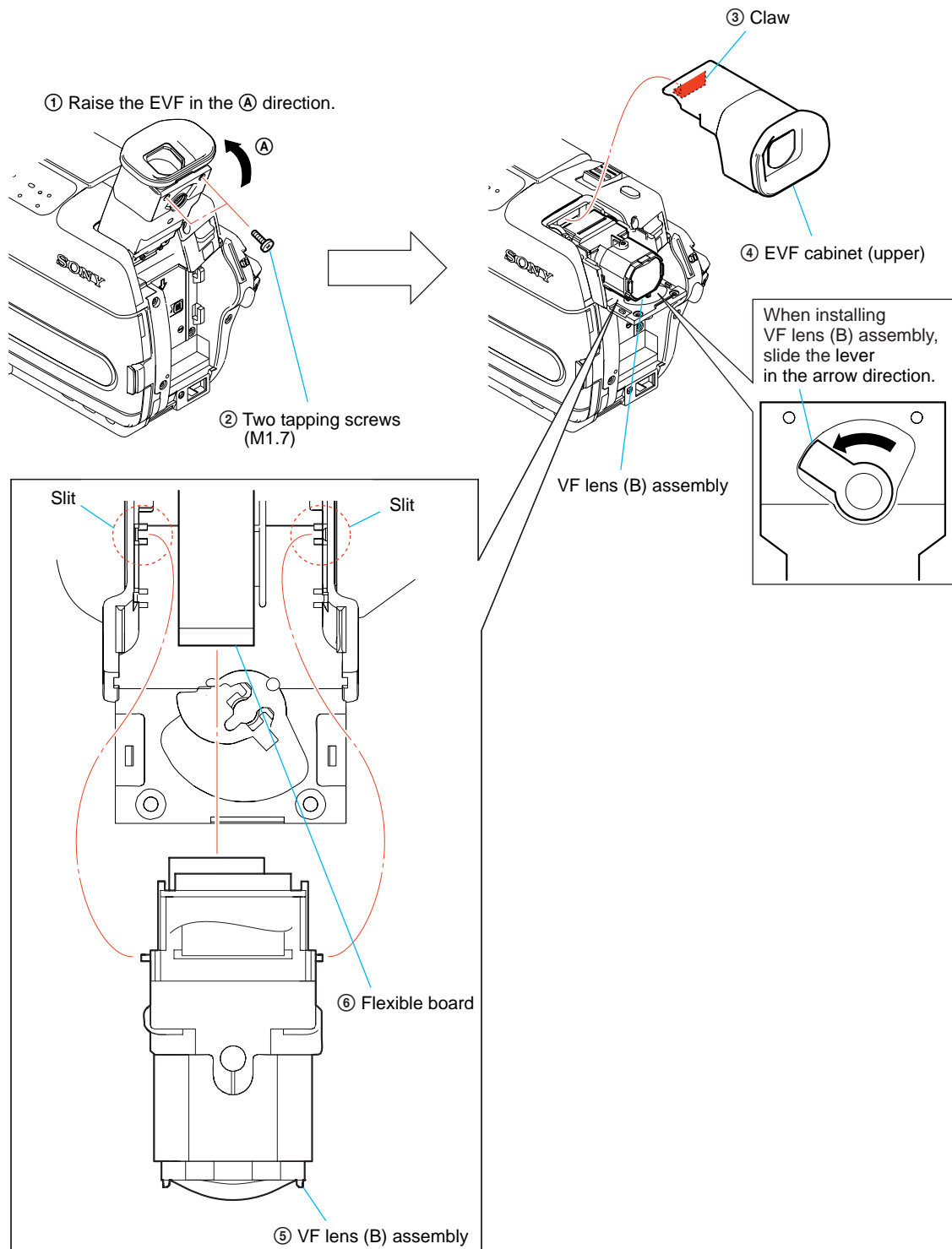
[SERVICE POSITION TO CHECK PD-180 BOARD]



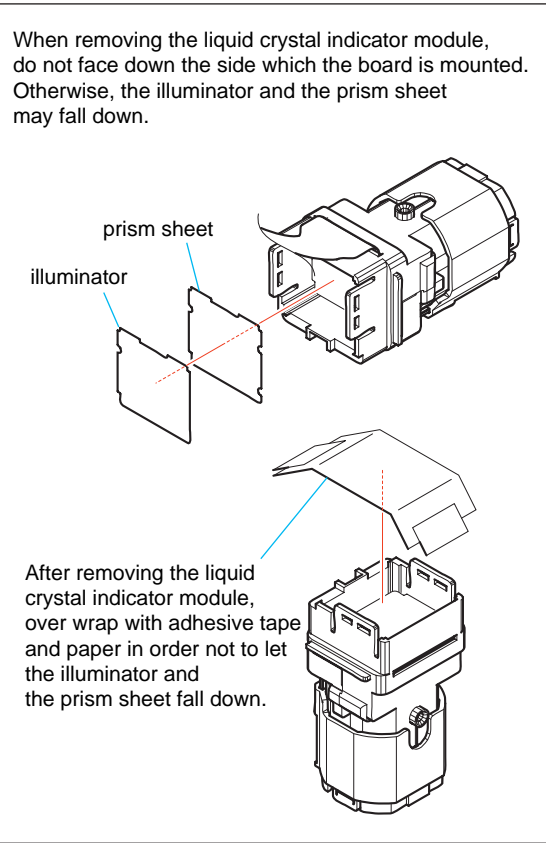
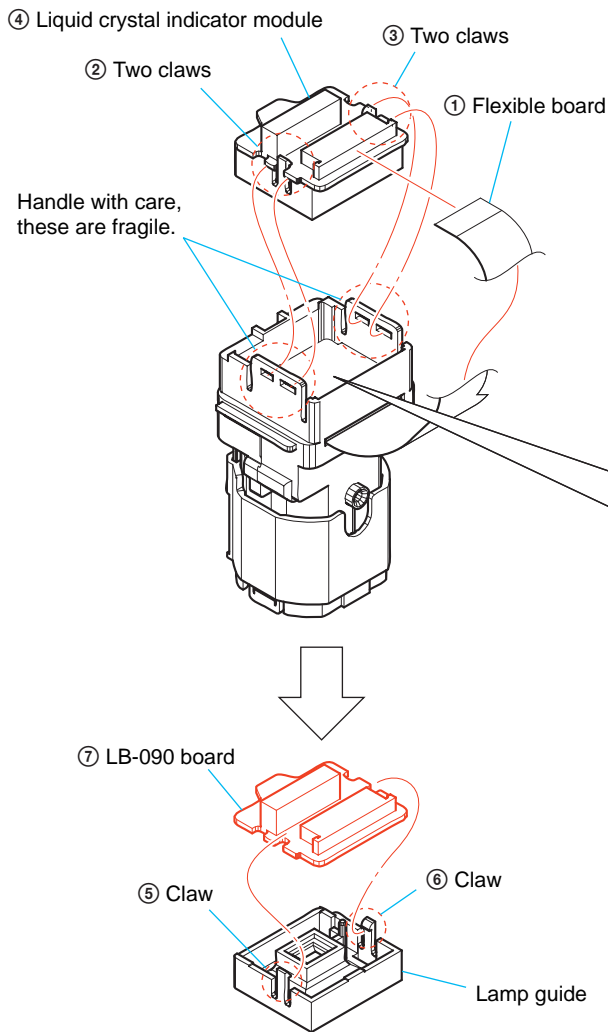
2-4. CONTROL SWITCH BLOCK (PR-3000)



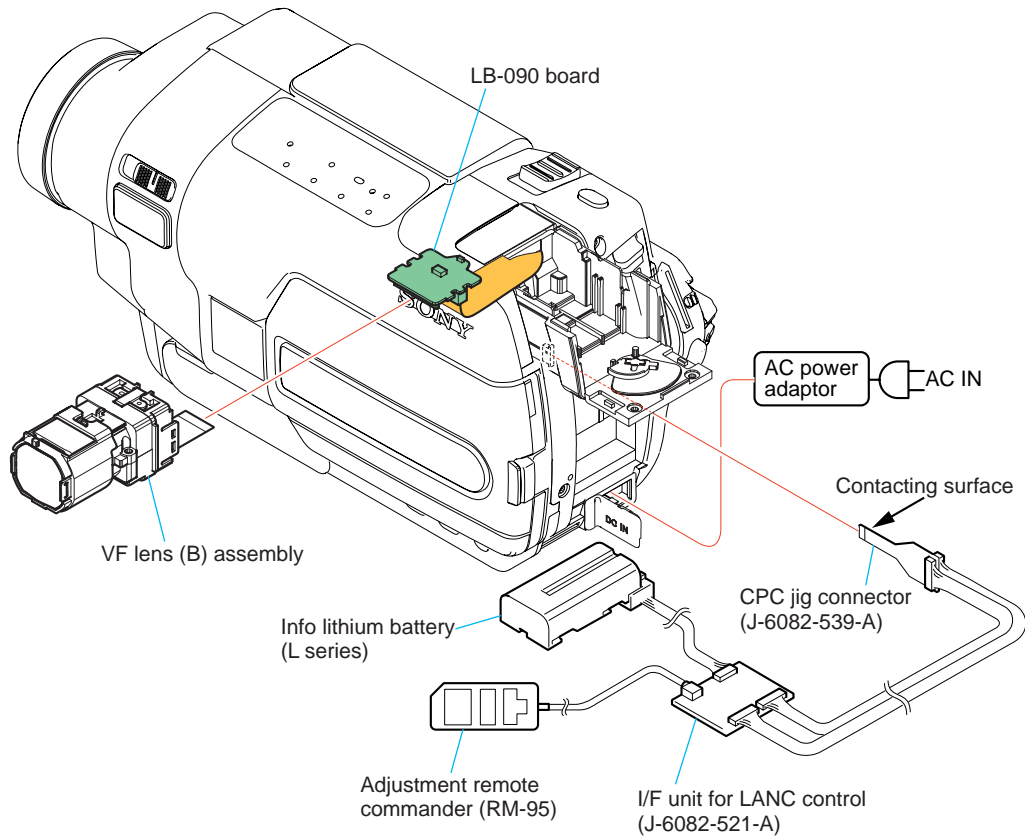
2-5. VF LENS (B) ASSEMBLY



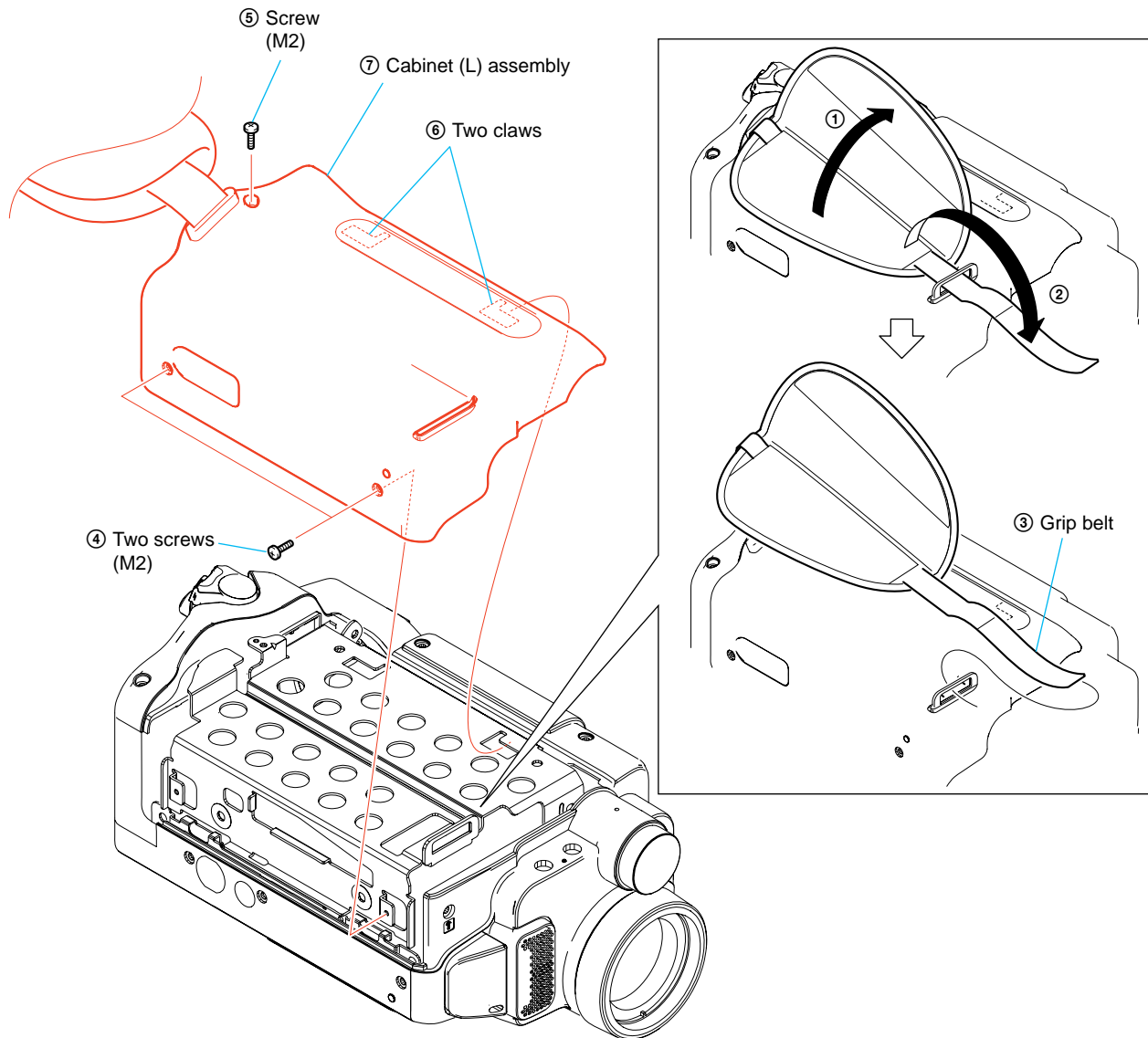
2-6. LB-090 BOARD



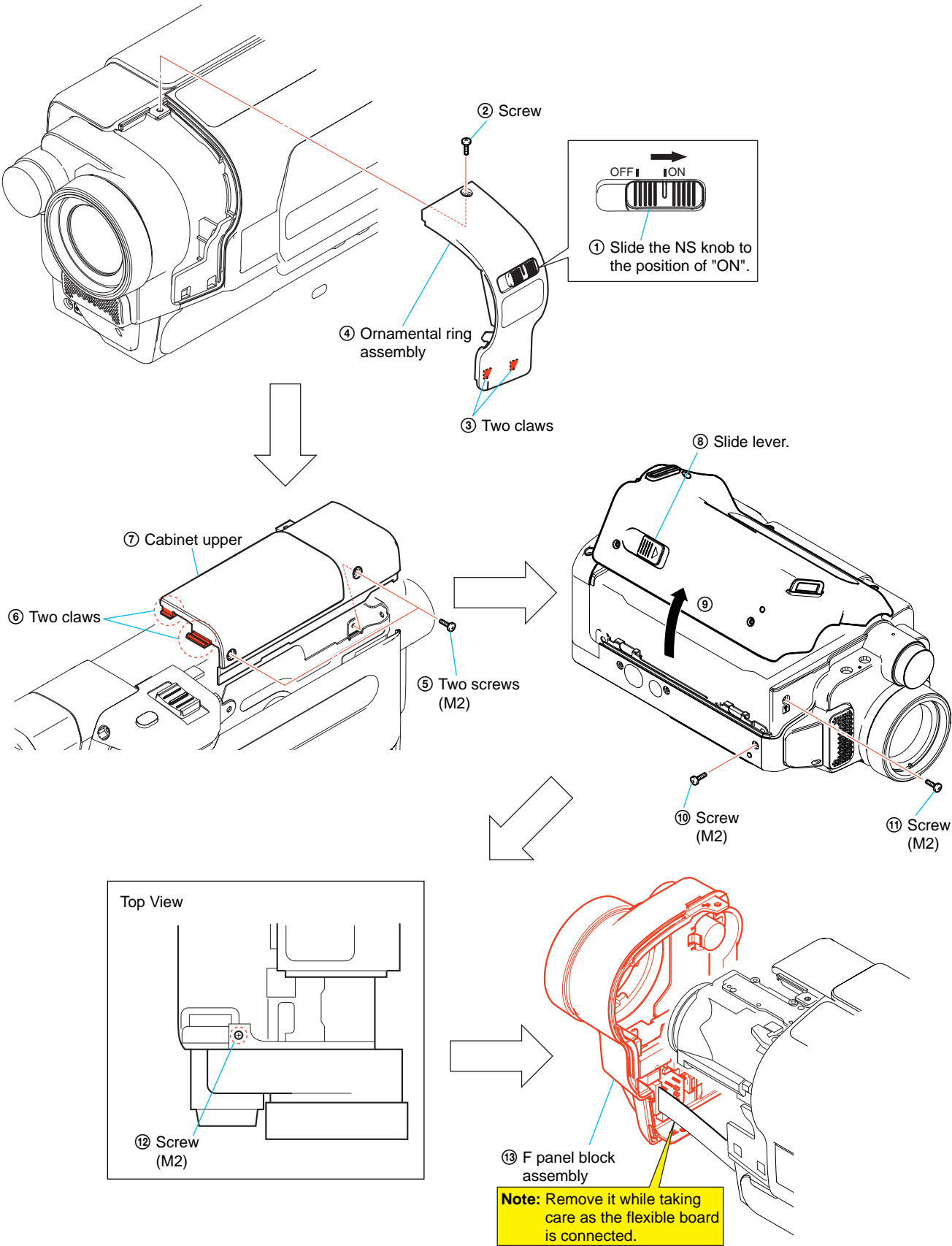
[SERVICE POSITION TO CHECK LB-090 BOARD]



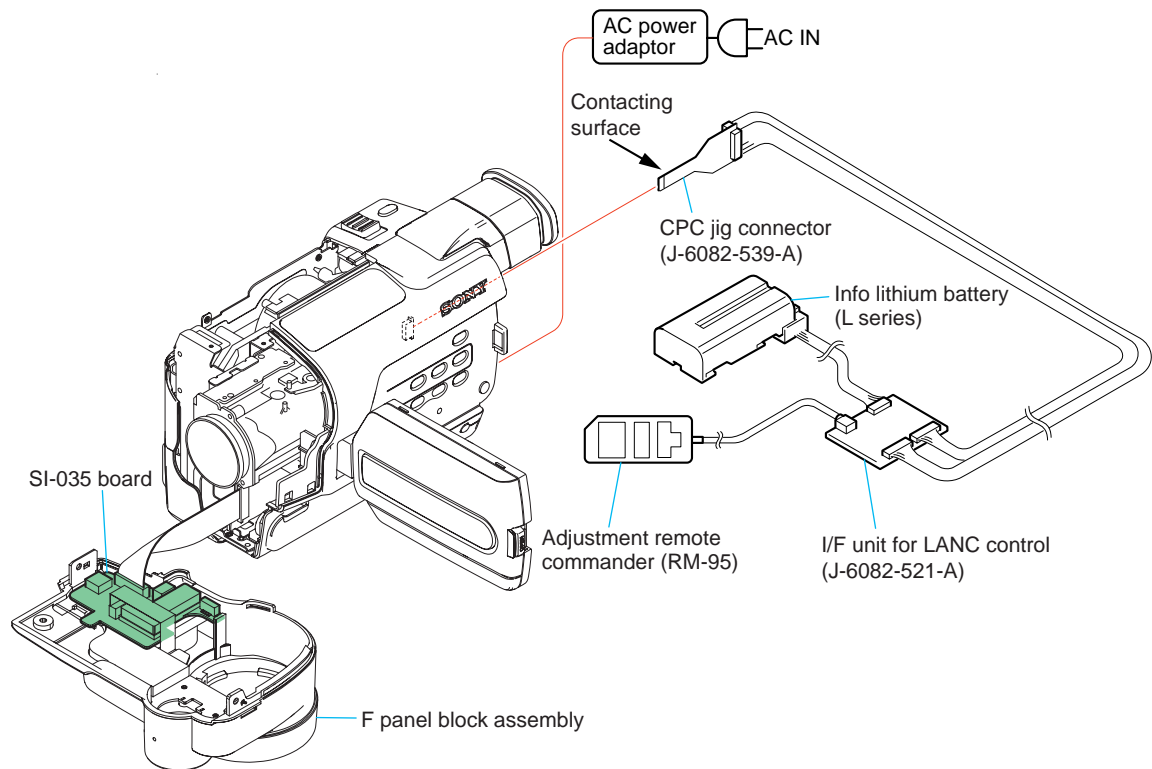
2-7. CABINET (L) ASSEMBLY



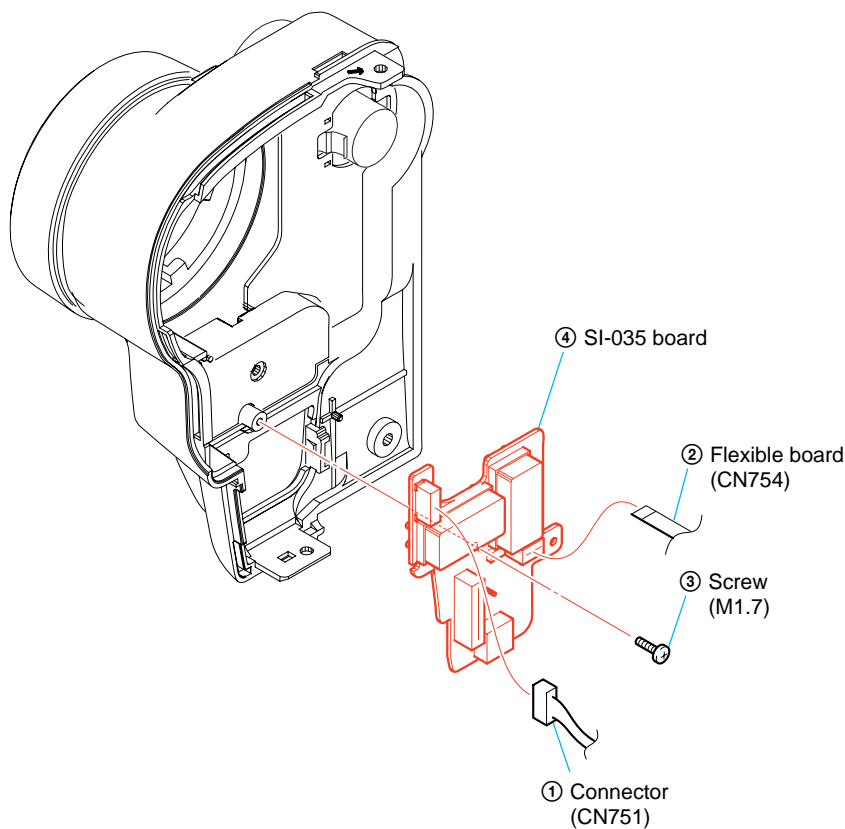
2-8. F PANEL BLOCK ASSEMBLY



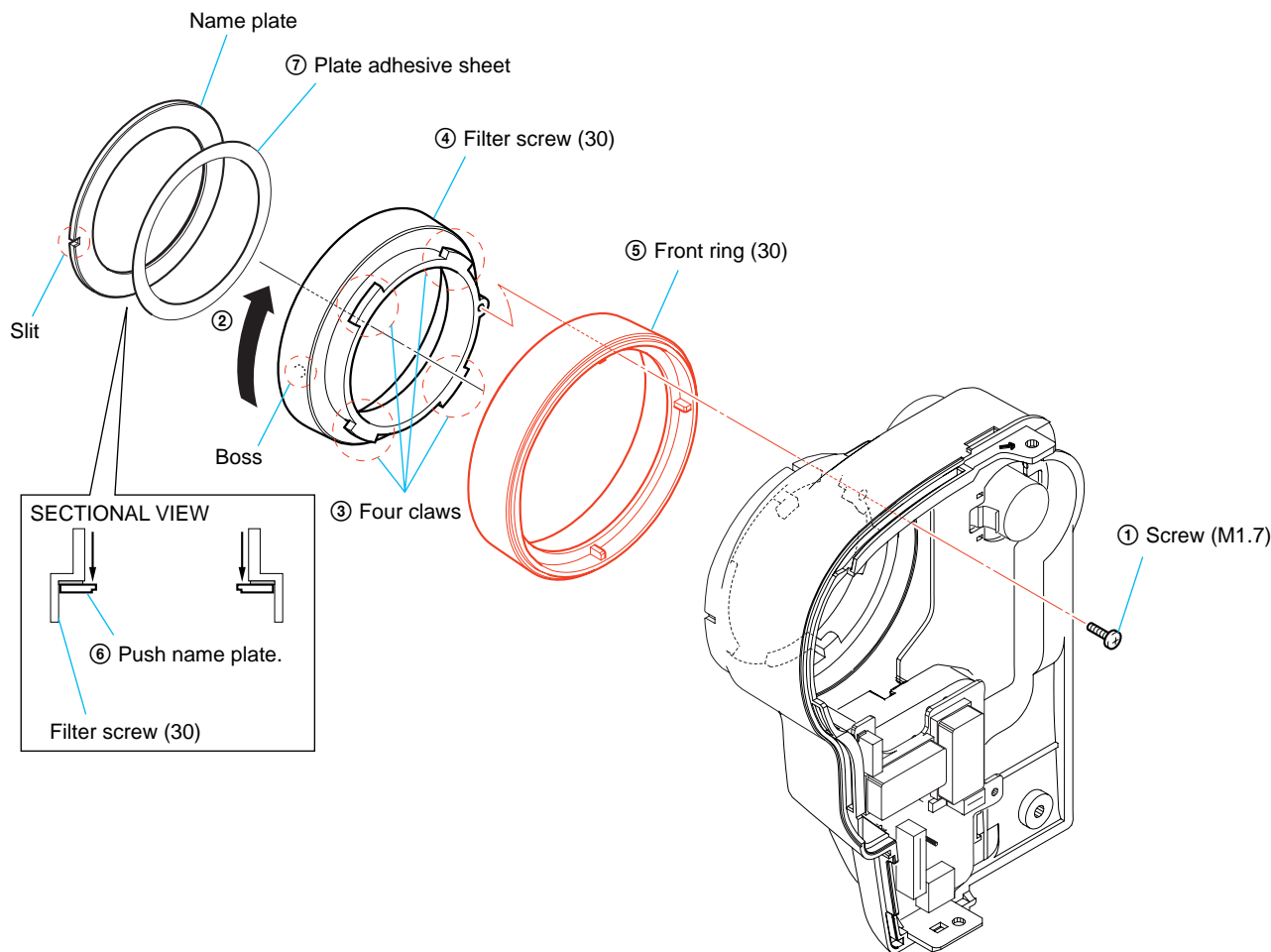
[SERVICE POSITION TO CHECK SI-035 BOARD]



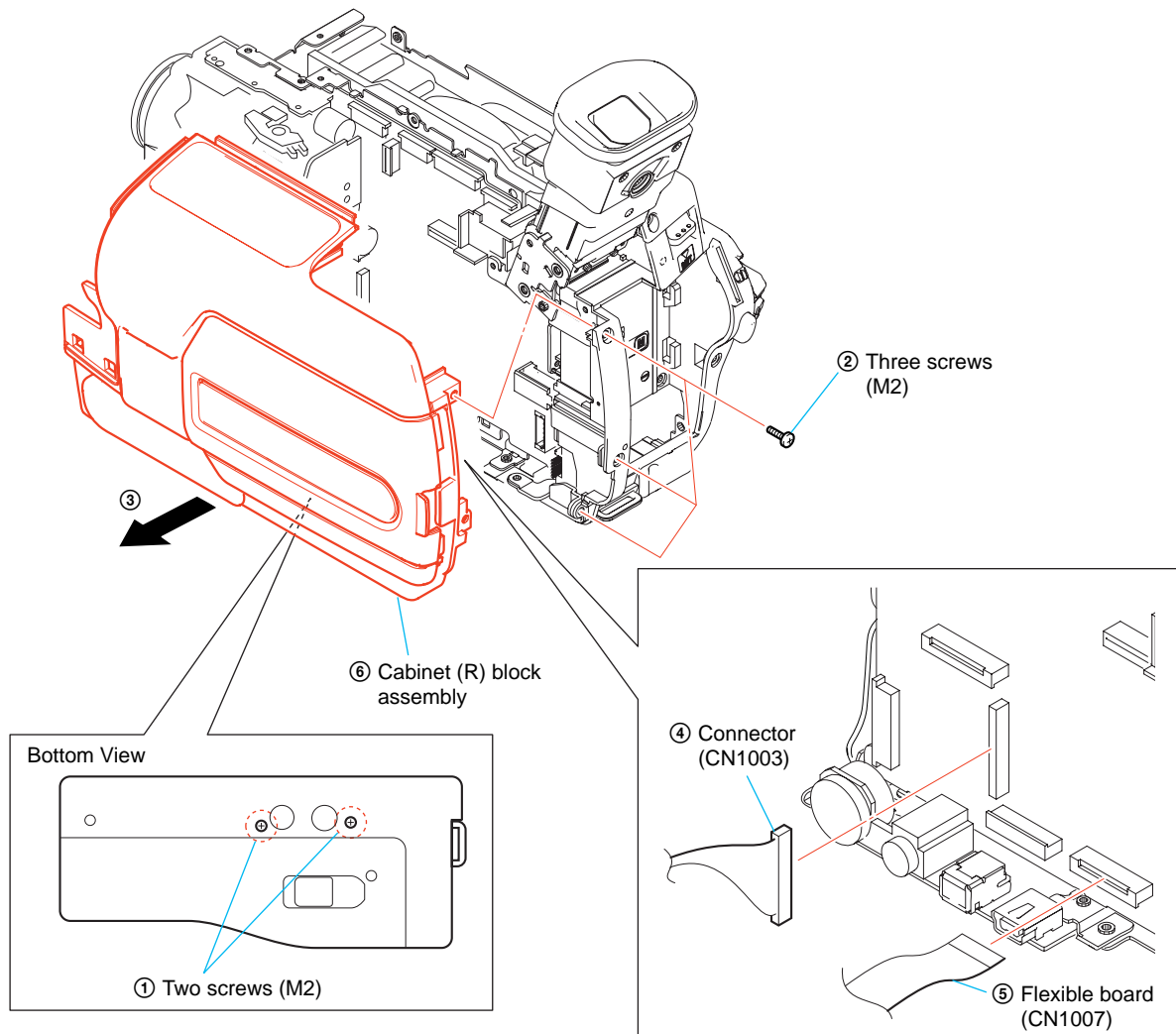
2-9. SI-035 BOARD



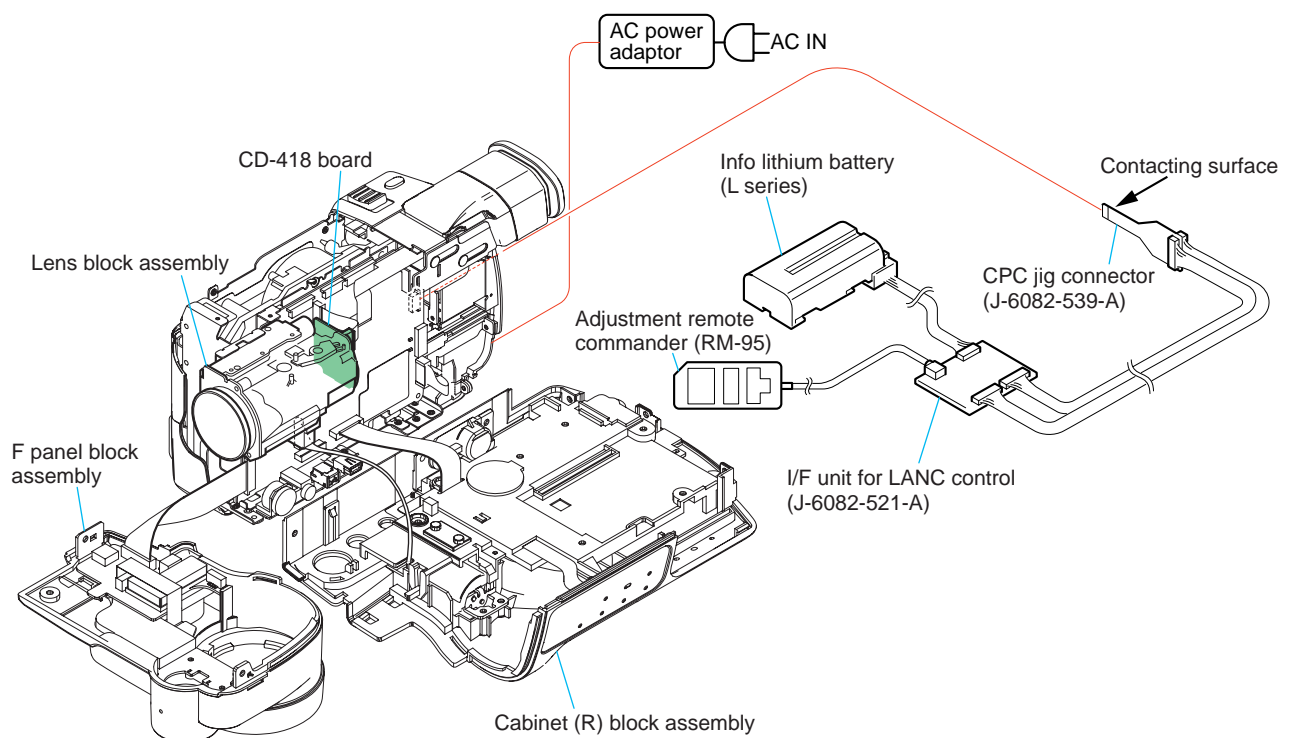
2-10.FRONT RING



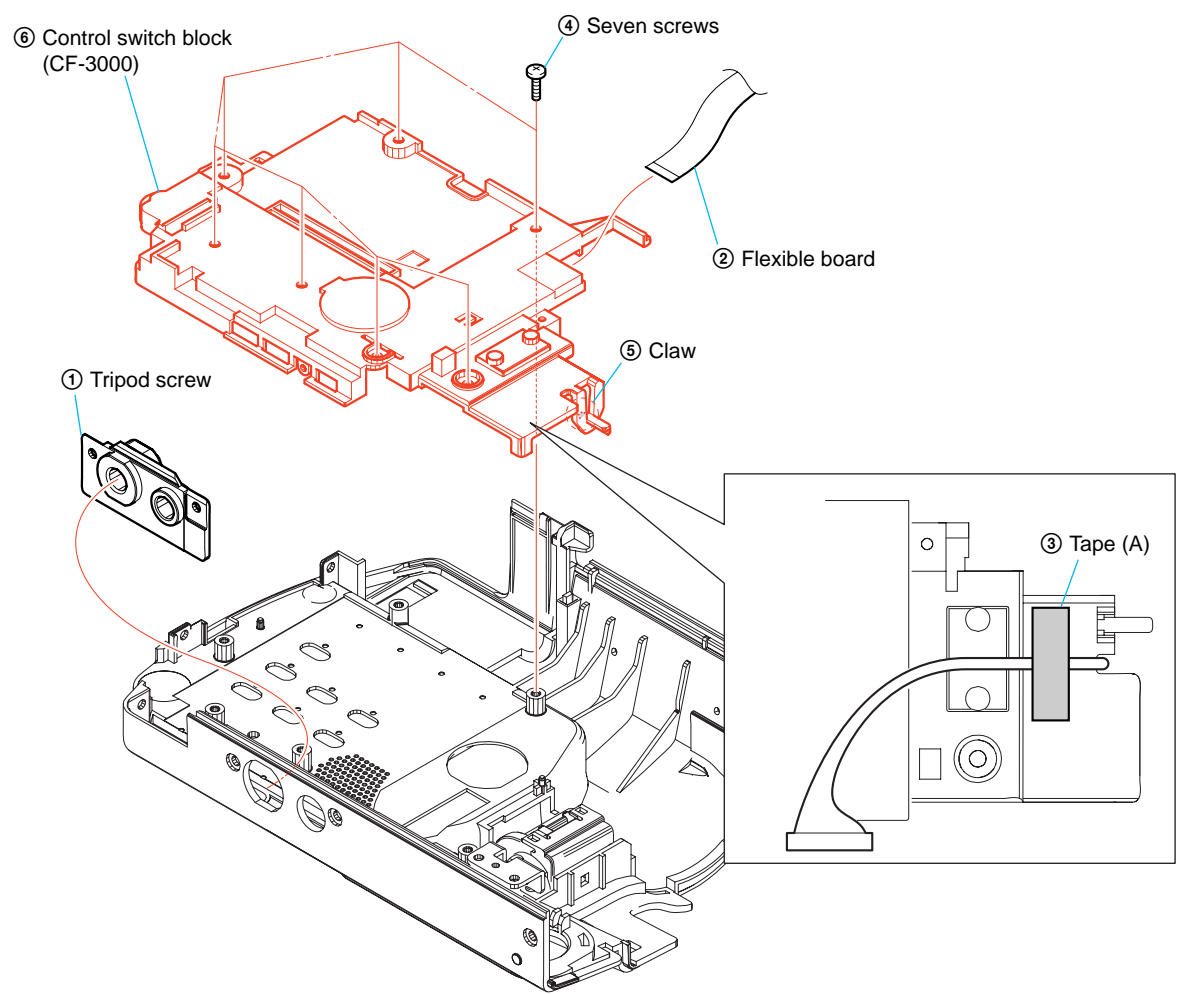
2-11.CABINET (R) BLOCK ASSEMBLY



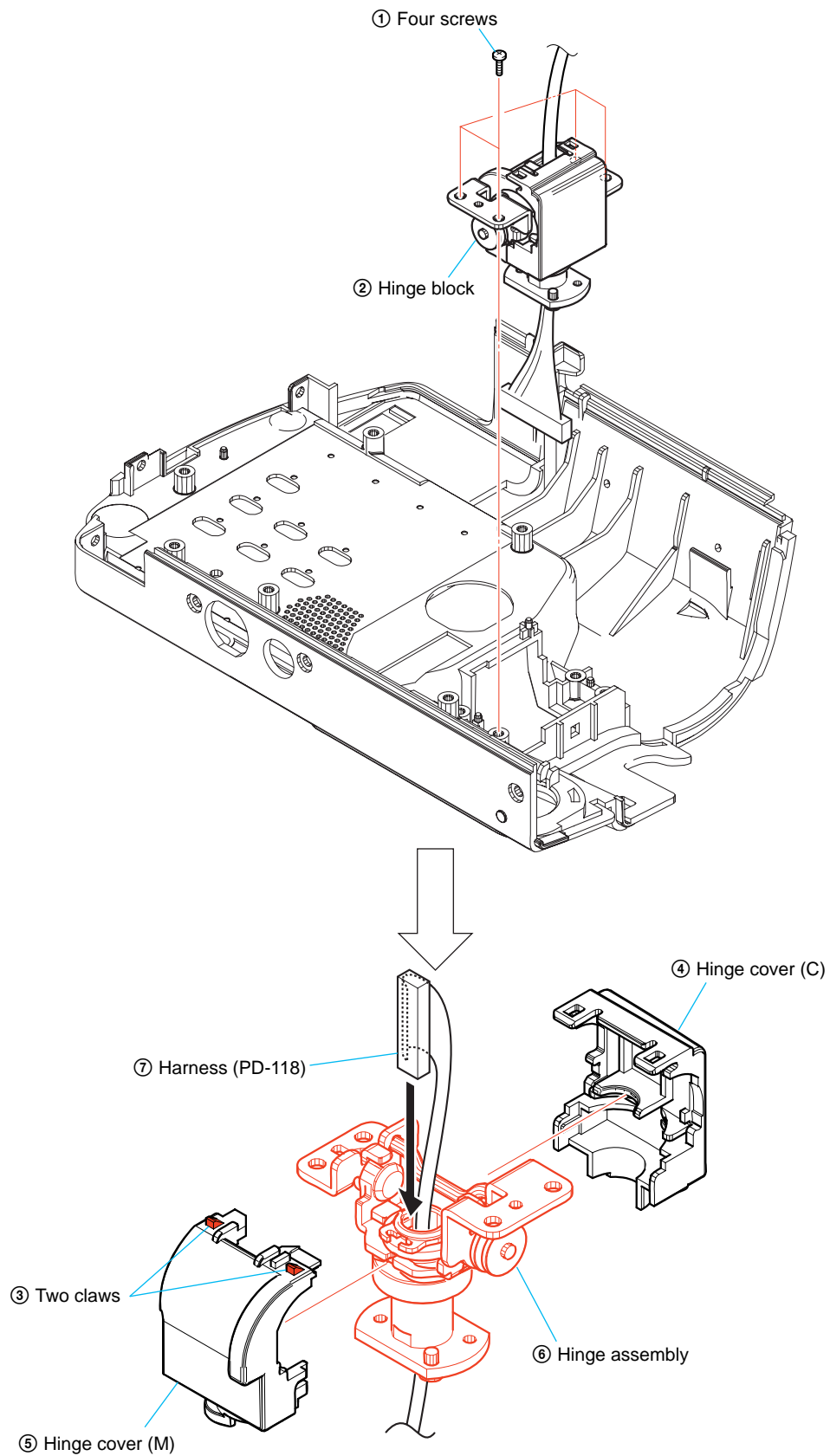
[SERVICE POSITION TO CHECK THE CAMERA SECTION]



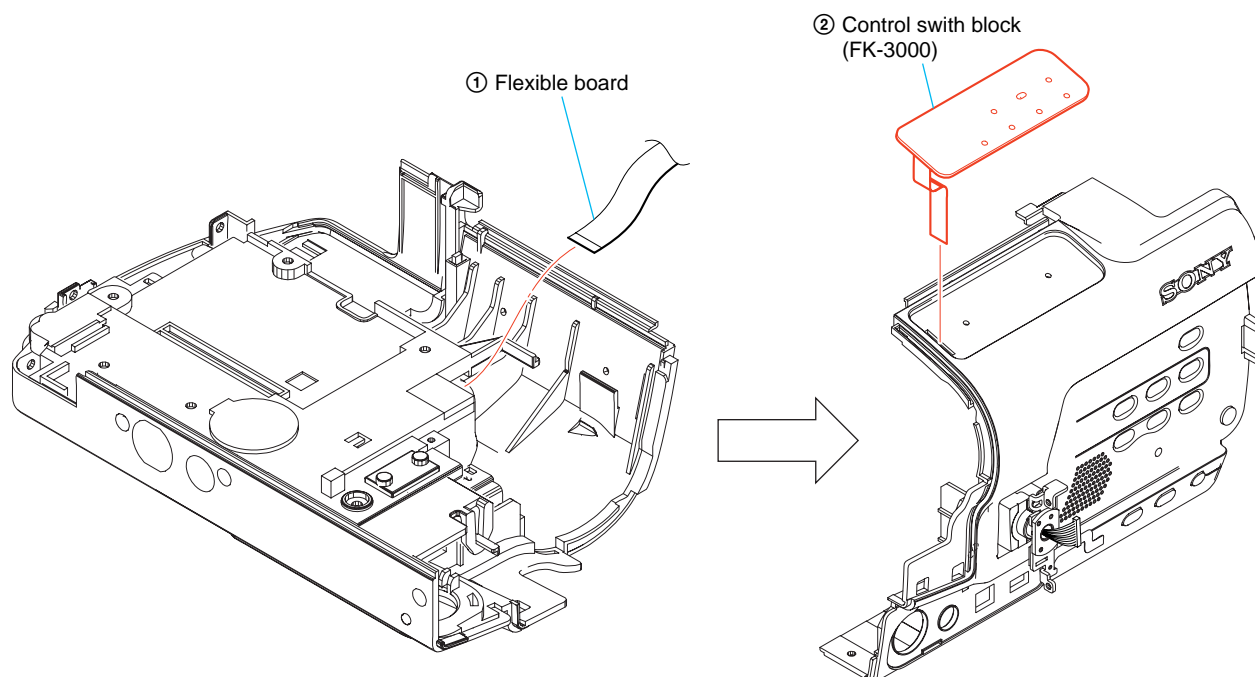
2-12.CONTROL SWITCH BLOCK (CF-3000)



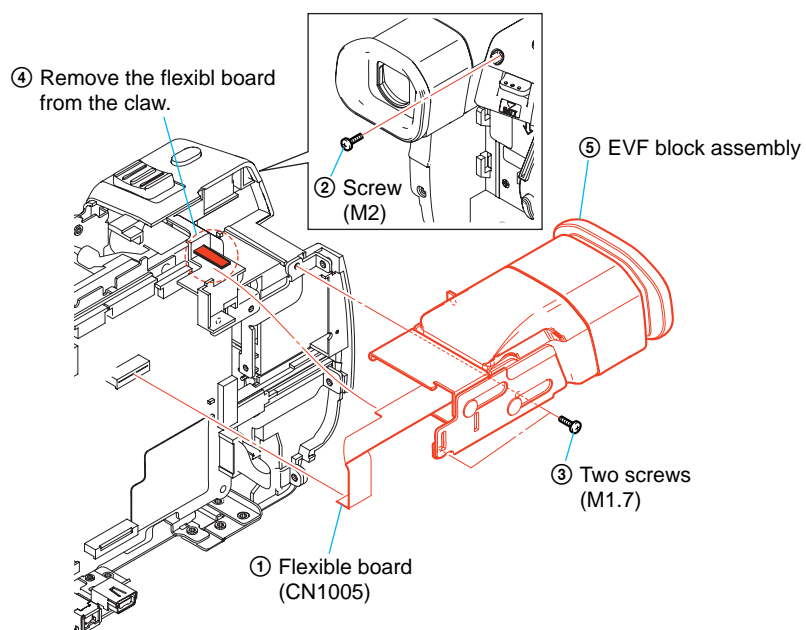
2-13.HINGE ASSEMBLY



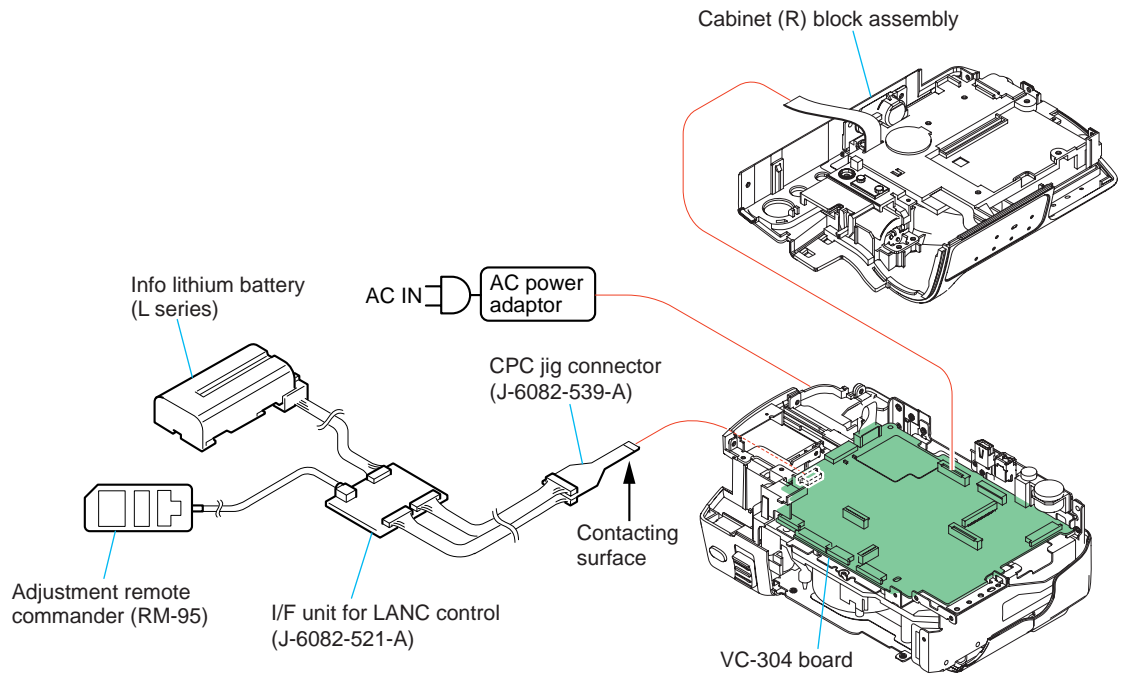
2-14.CONTROL SWITCH BLOCK (FK-3000)



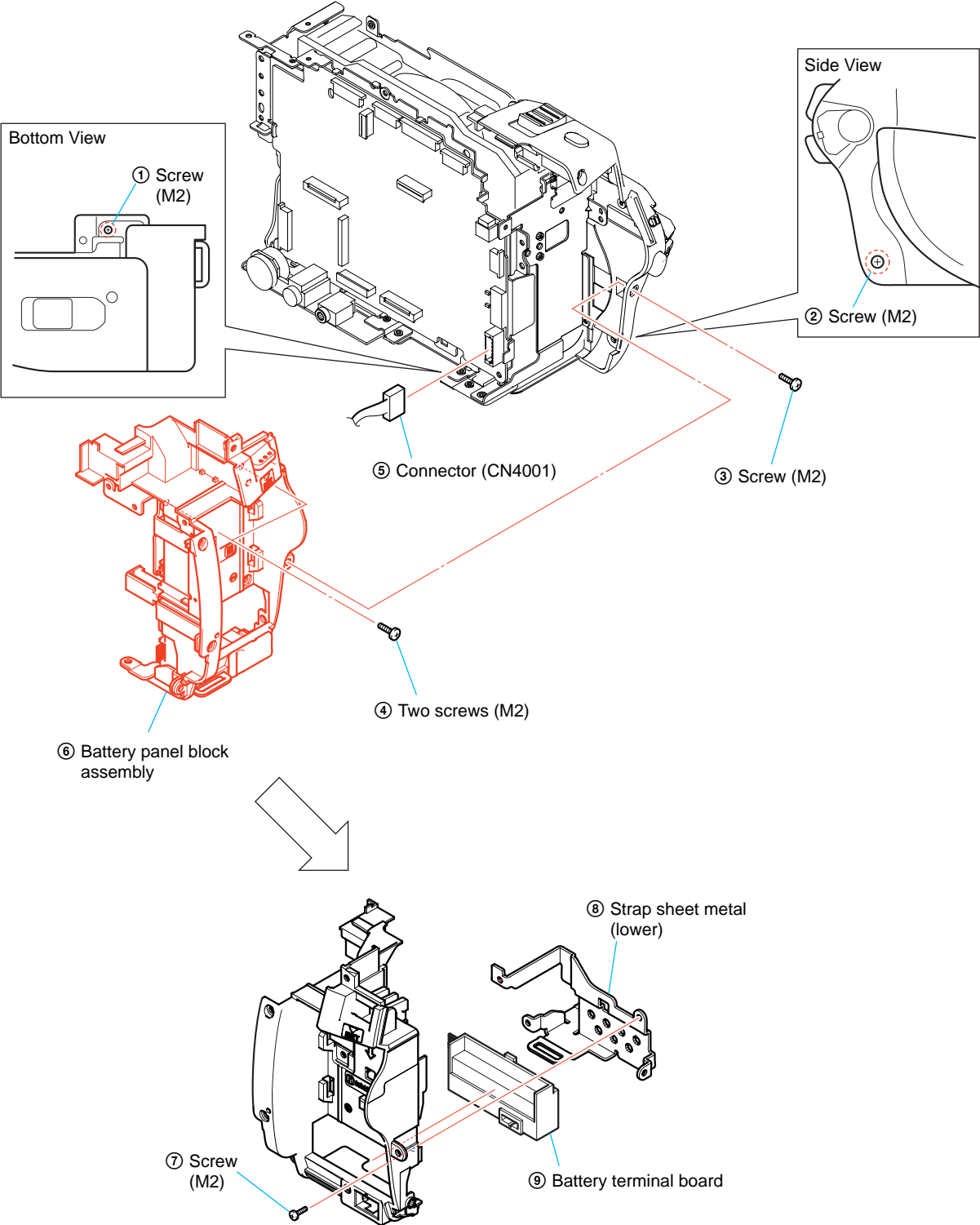
2-15.EVF BLOCK ASSEMBLY

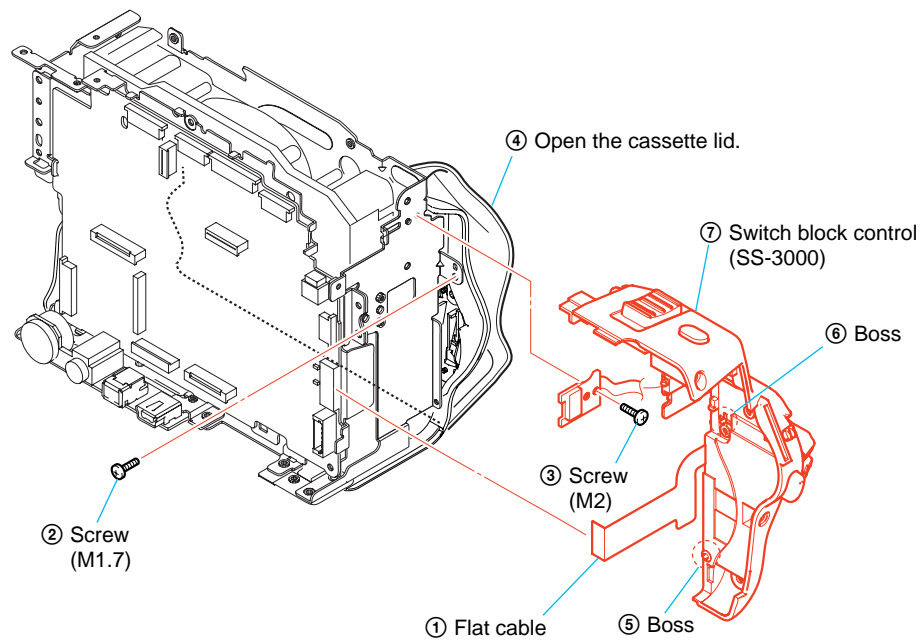
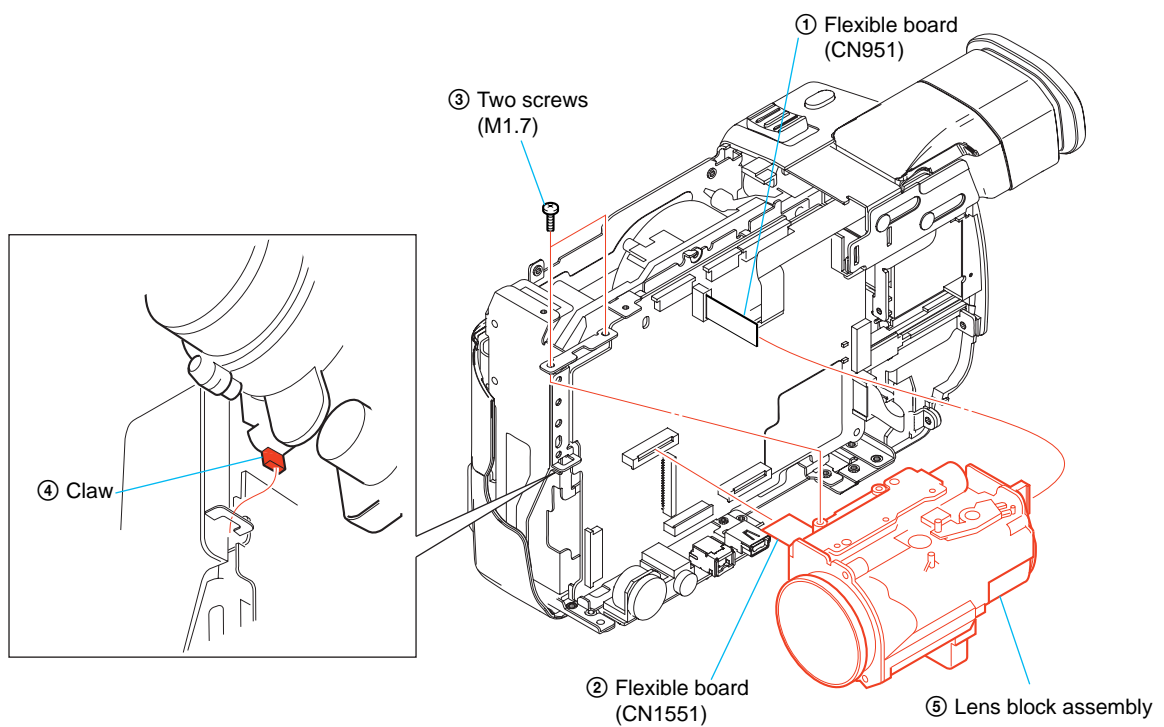


[SERVICE POSITION TO CHECK VC-304 BOARD (SIDE A)]

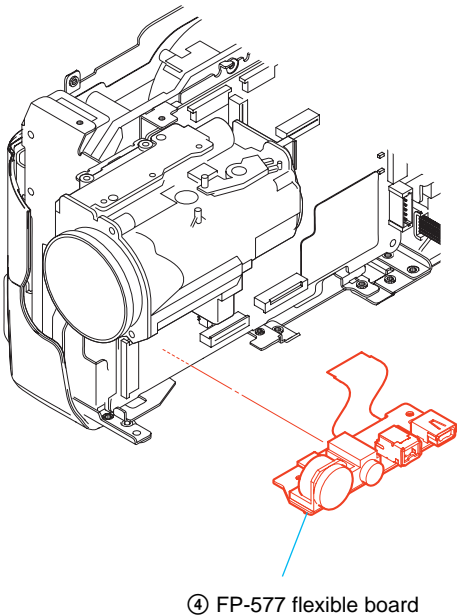
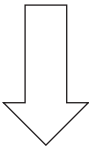
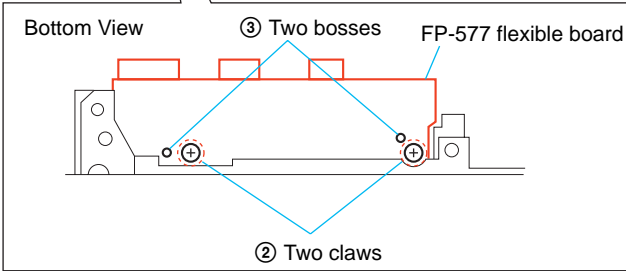
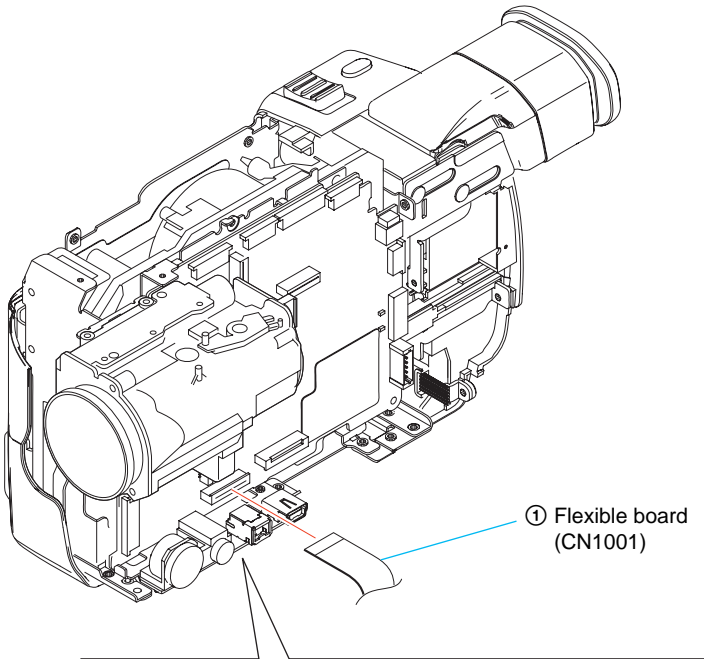


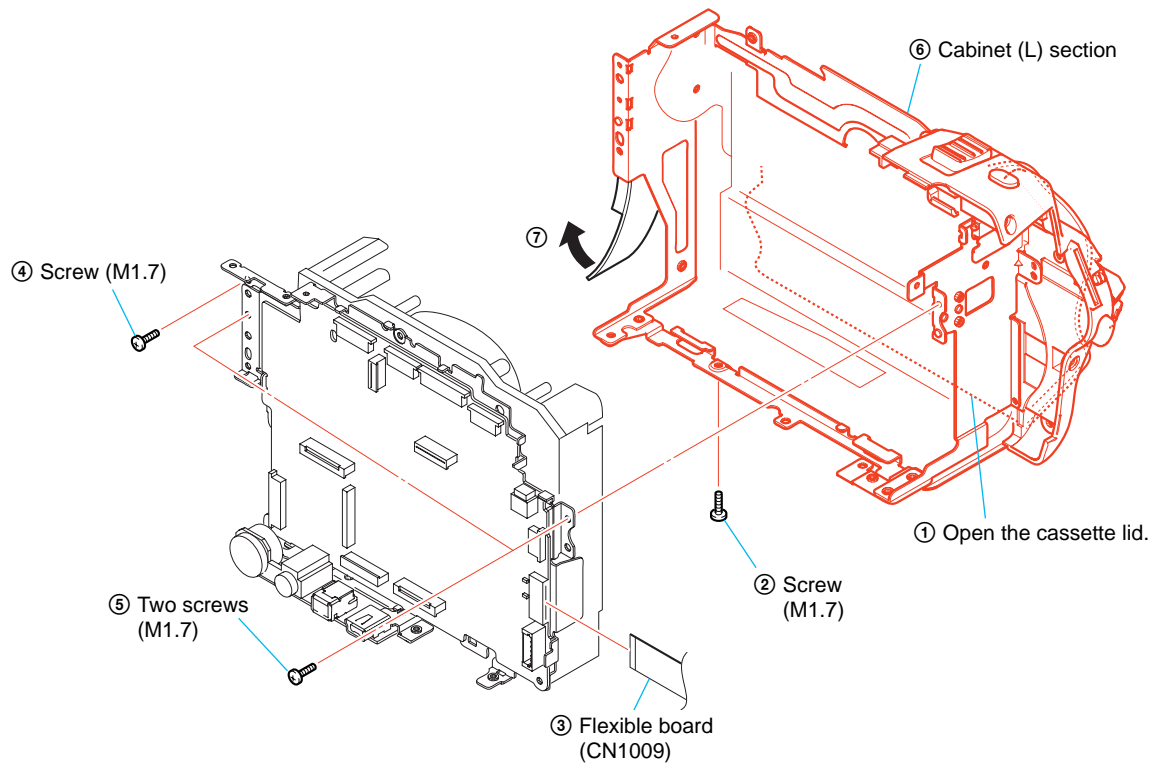
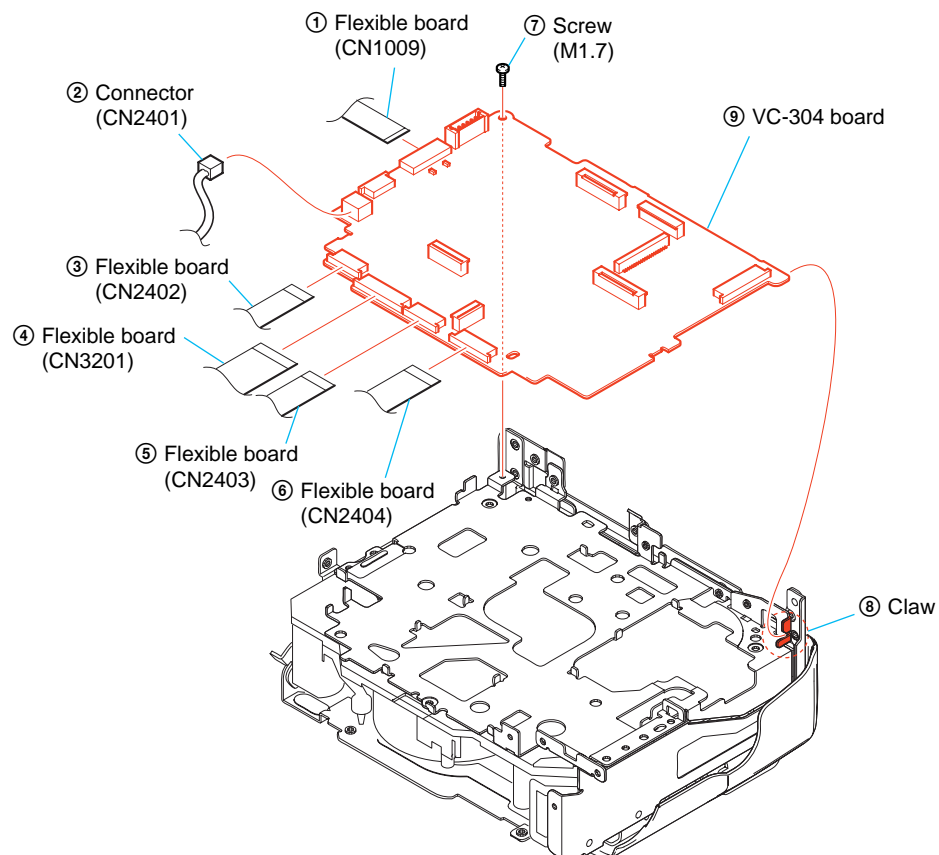
2-16.BATTERY PANEL BLOCK ASSEMBLY



2-17.CONTROL SWITCH BLOCK (SS-3000)**2-18.LENS BLOCK ASSEMBLY**

2-19.FP-577 FLEXIBLE BOARD



2-20.CABINET (L) SECTION**2-21.VC-304 BOARD**

[SERVICE POSITION TO CHECK VC-304 BOARD (SIDE B)]

Connection to Check VC-304 Board (Side B)

To check VC-304 board (side B), set the camera or VTR to the "Forced camera power ON" mode. Operate the camera functions of the zoom and focus, the VTR section using the adjustment remote commander (with the HOLD switch set in the OFF position).

Setting the "Forced Camera Power ON" mode

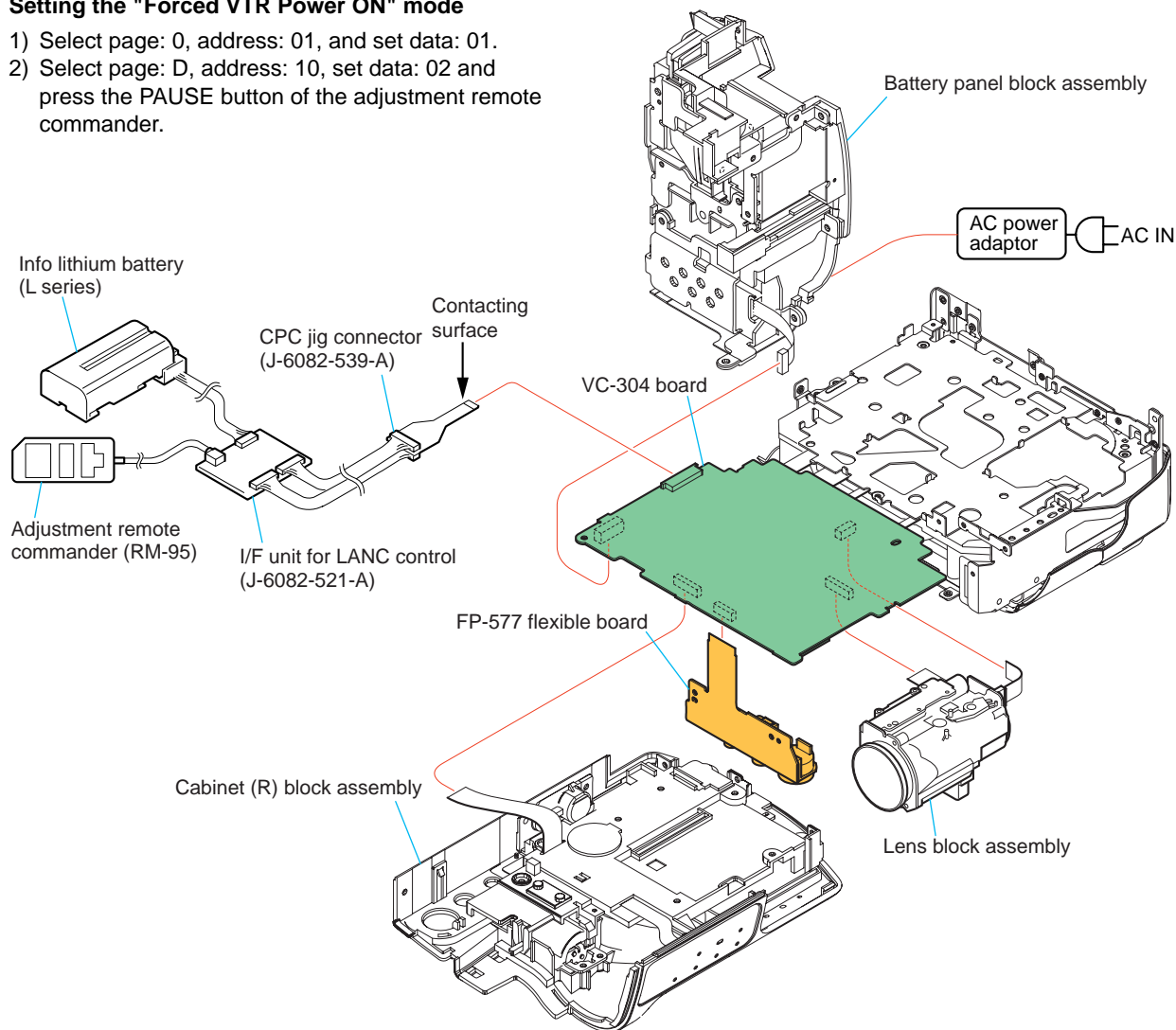
- 1) Select page: 0, address: 01, and set data: 01.
- 2) Select page: D, address: 10, set data: 01 and press the PAUSE button of the adjustment remote commander.

Exiting the "Forced Power ON" mode

- 1) Select page: 0, address: 01, and set data: 01.
- 2) Select page: D, address: 10, data: 00, and press the PAUSE button of the adjustment remote commander.
- 3) Select page : 0, address: 01, and set data: 00.

Setting the "Forced VTR Power ON" mode

- 1) Select page: 0, address: 01, and set data: 01.
- 2) Select page: D, address: 10, set data: 02 and press the PAUSE button of the adjustment remote commander.



[SERVICE POSITION TO CHECK THE MECHANISM DECK]**Connection to Check the Mechanism deck**

To check the mechanism deck, set the VTR to the "Forced VTR power ON" mode. (Or, connect the control switch block (SS-3000) to the CN1009 of VC-304 board and set the power switch to the "PLAYER" position.)

Operate the VTR function using the adjustment remote commander (with the HOLD switch set in the OFF position).

Setting the "Forced VTR Power ON" mode

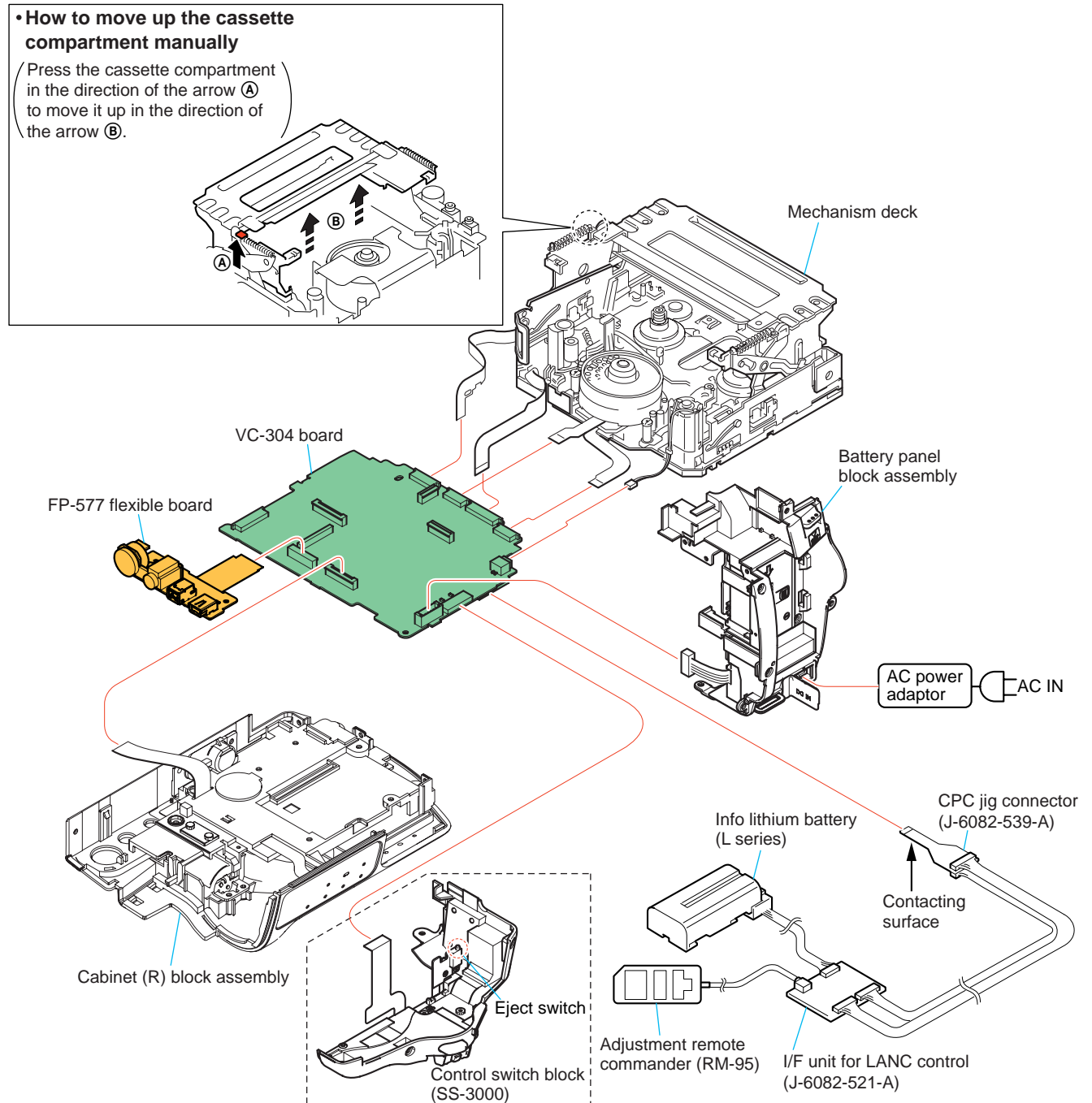
- 1) Select page: 0, address: 01, and set data: 01.
- 2) Select page: D, address: 10, set data: 02 and press the PAUSE button of the adjustment remote commander.

Exiting the "Forced VTR Power ON" mode

- 1) Select page: 0, address: 01, and set data: 01.
- 2) Select page: D, address: 10, data: 00, and press the PAUSE button of the adjustment remote commander.
- 3) Select page: 0, address: 01, and set data: 00.

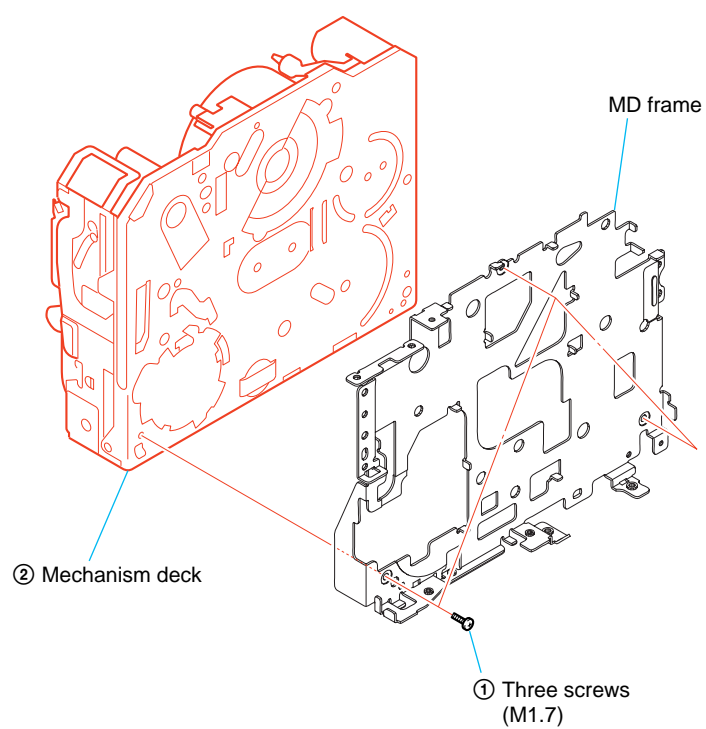
•How to move up the cassette compartment manually

(Press the cassette compartment in the direction of the arrow (A) to move it up in the direction of the arrow (B).



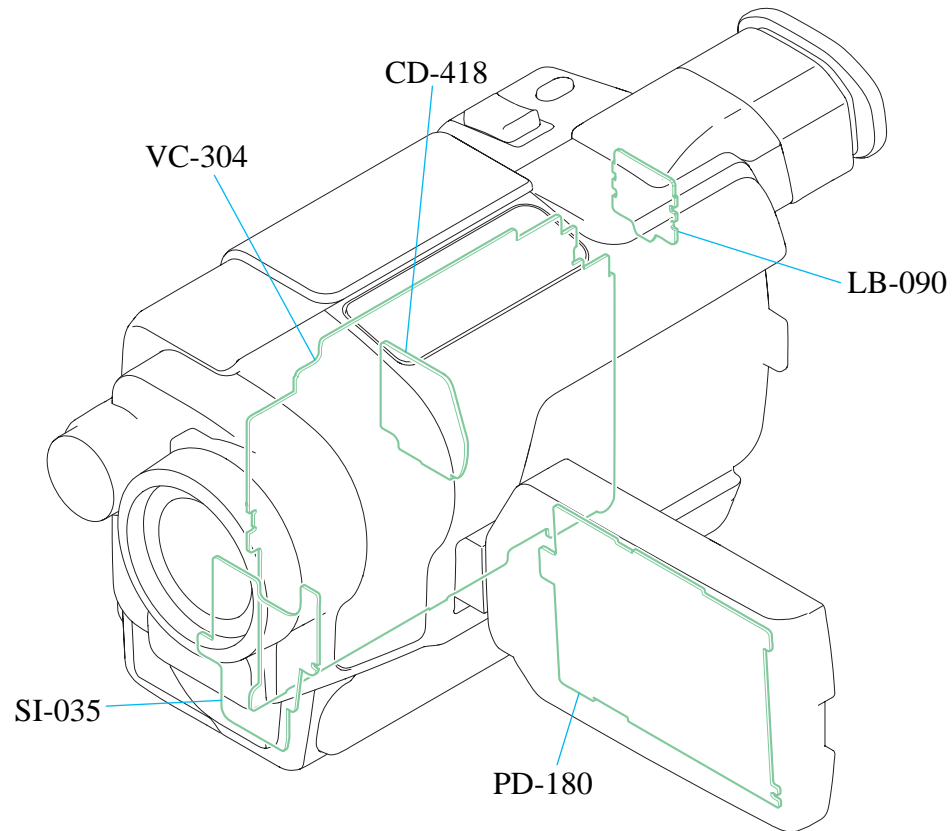
When exiting the "Forced VTR Power ON" mode, connect the control switch block (SS-3000) to the CN1009 of VC-304 board. Or, when ejecting the cassette, connect the control switch block (SS-3000) to the CN1009 of VC-304 board. and press the EJECT switch.

2-22.MECHANISM DECK BLOCK





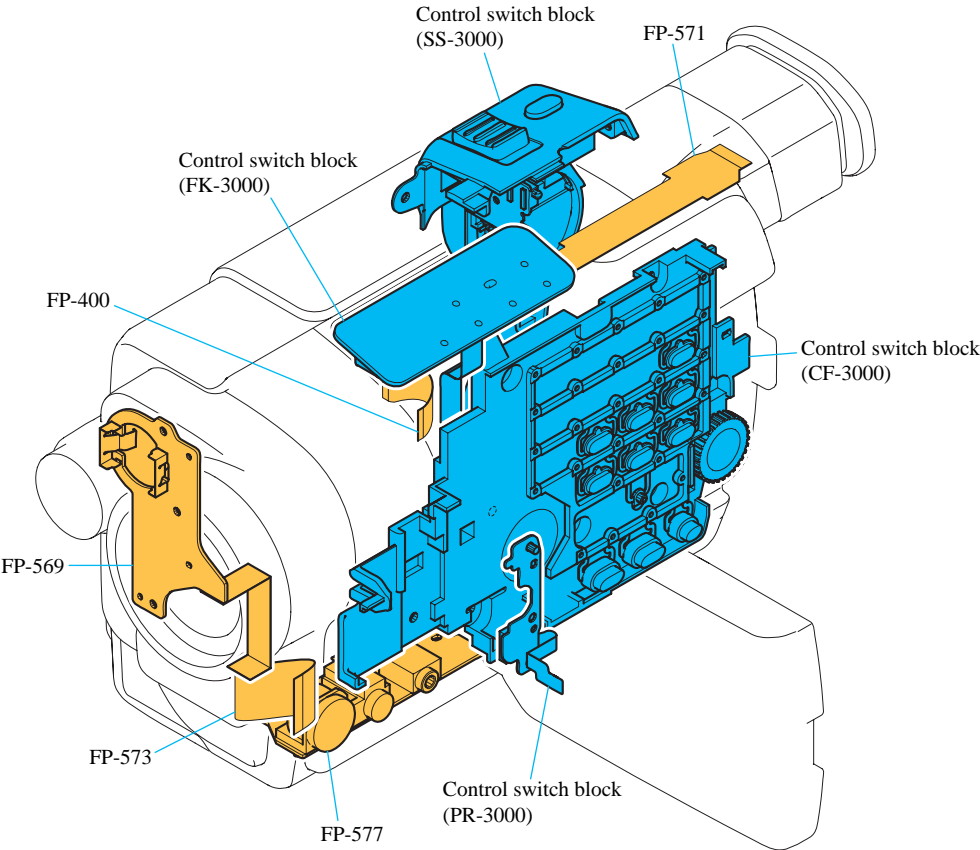
2-23.CIRCUIT BOARDS LOCATION



Board Name	Function
CD-418	CCD IMAGER
LB-090	EVF BACKLIGHT
PD-180	RGB DRIVE, TIMING GENERATOR, BACKLIGHT DRIVE
SI-035	STEADYSHOT, MIC
VC-304	A/D CONVERTER, TIMING GENERATOR, DV SIGNAL PROCESS, DV INTERFACE, VIDEO OUT, LENS DRIVE, REC/PB AMP, SERVO, CAMERA/MECHA CONTROL, HI CONTROL, EVF DRIVE, AUDIO PROCESS, DC CONTROL



2-24.FLEXIBLE BOARDS LOCATION

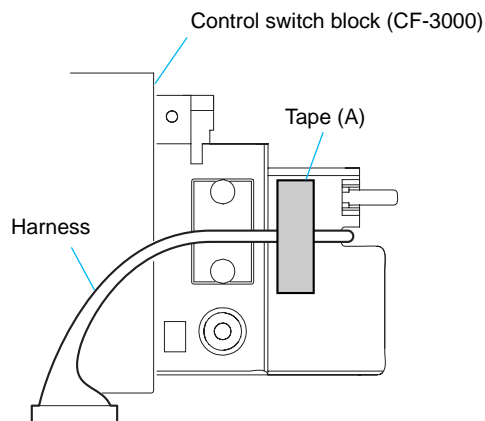




HELP

Sheet attachment positions and procedures of processing the flexible boards/harnesses are shown.

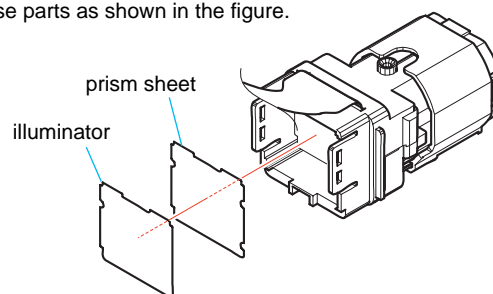
CABINET (R) BLOCK ASSEMBLY



When installing Control switch block (CF-3000), set harness and tape (A) as shown in the figure.

PRISM SHEET AND ILLUMINATOR

When installing prism sheet and illuminator, set these parts as shown in the figure.





3. BLOCK DIAGRAMS

Link

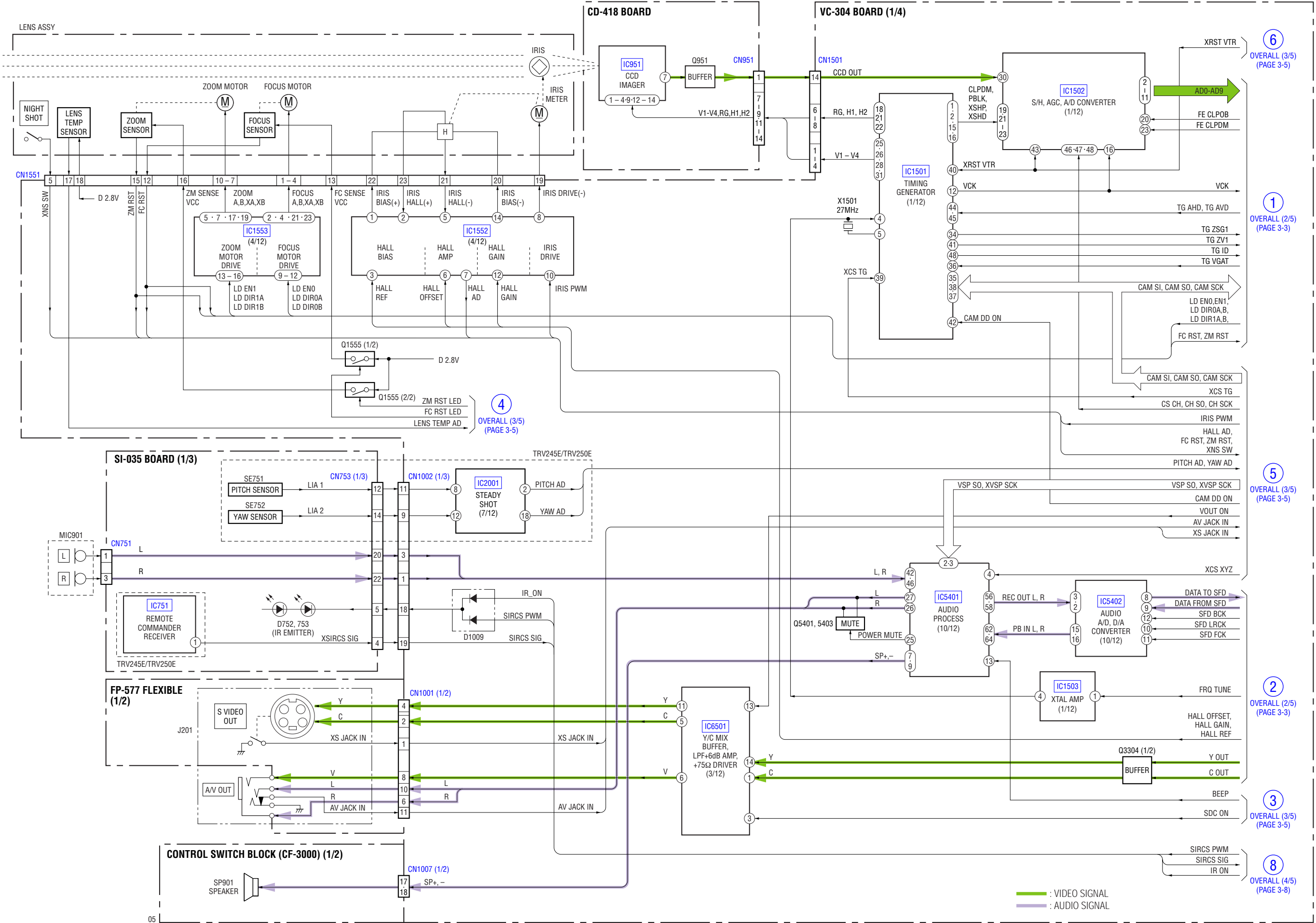
OVERALL BLOCK DIAGRAM (1/5)	OVERALL BLOCK DIAGRAM (5/5)
OVERALL BLOCK DIAGRAM (2/5)	POWER BLOCK DIAGRAM (1/2)
OVERALL BLOCK DIAGRAM (3/5)	POWER BLOCK DIAGRAM (2/2)
OVERALL BLOCK DIAGRAM (4/5)	



SECTION 3
BLOCK DIAGRAMS

3. BLOCK DIAGRAMS

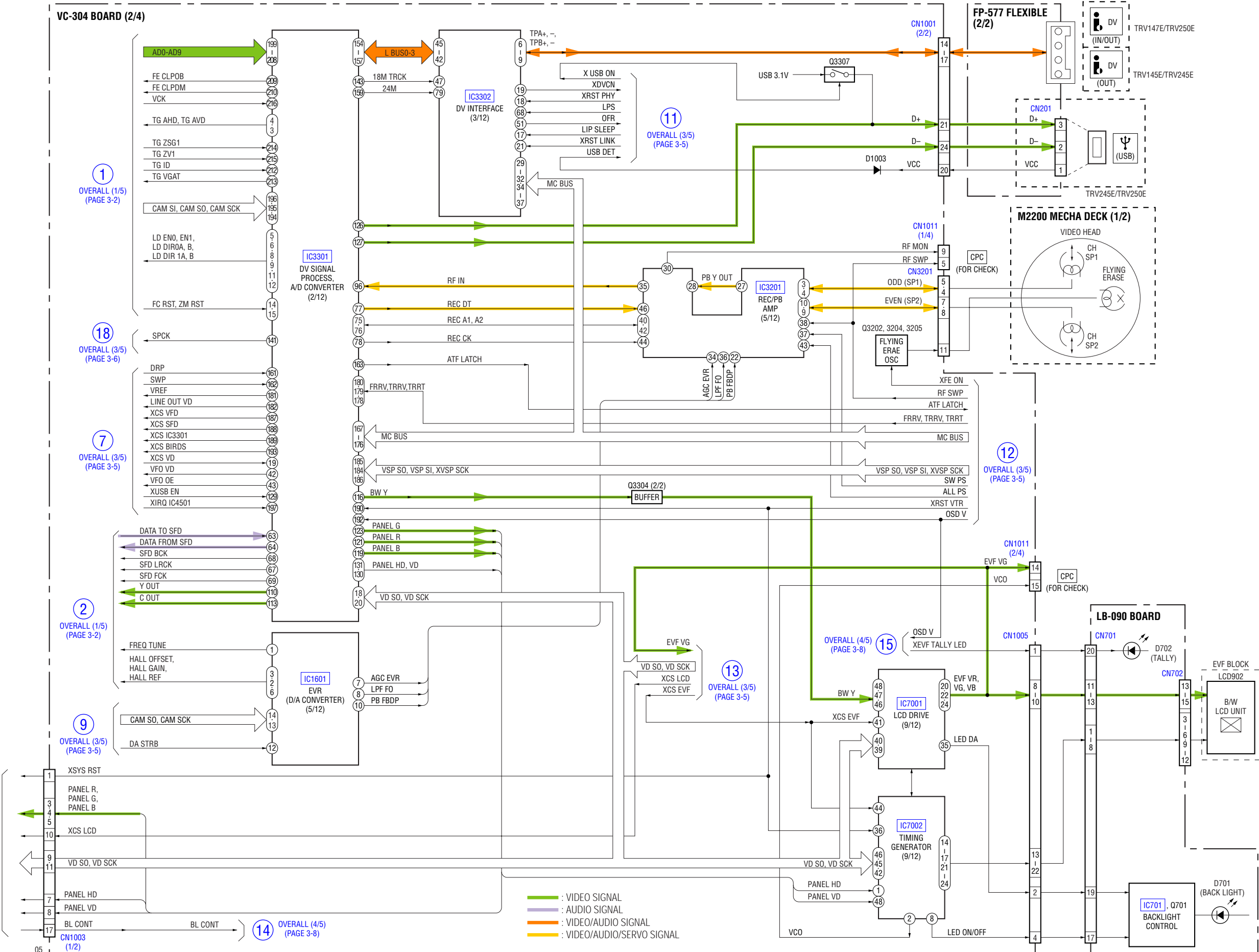
3-1. OVERALL BLOCK DIAGRAM (1/5) () : Number in parenthesis () indicates the division number of schematic diagram where the component is located.



3. BLOCK DIAGRAMS

3-2. OVERALL BLOCK DIAGRAM (2/5)

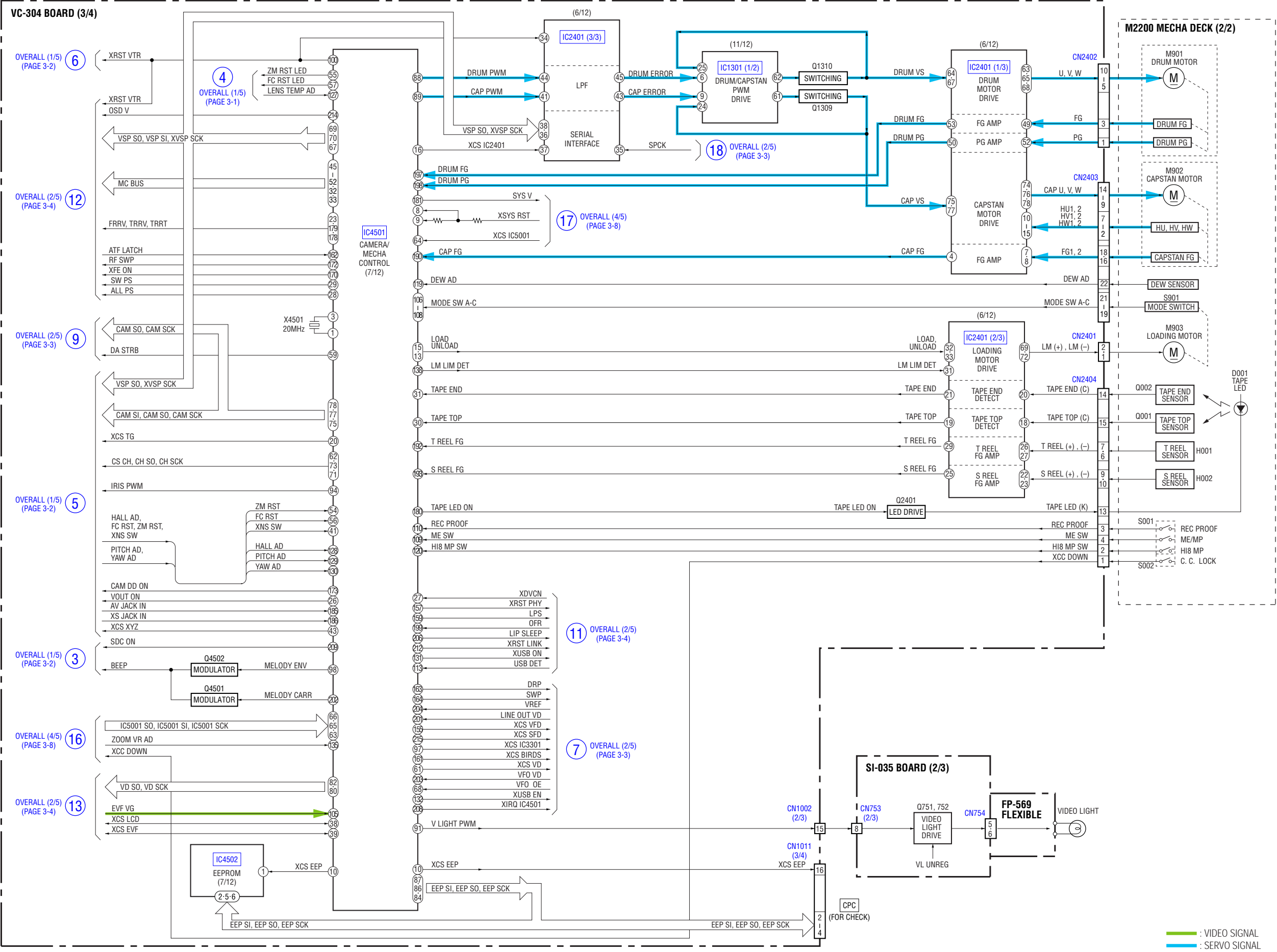
() : Number in parenthesis () indicates the division number of schematic diagram where the component is located.





3. BLOCK DIAGRAMS

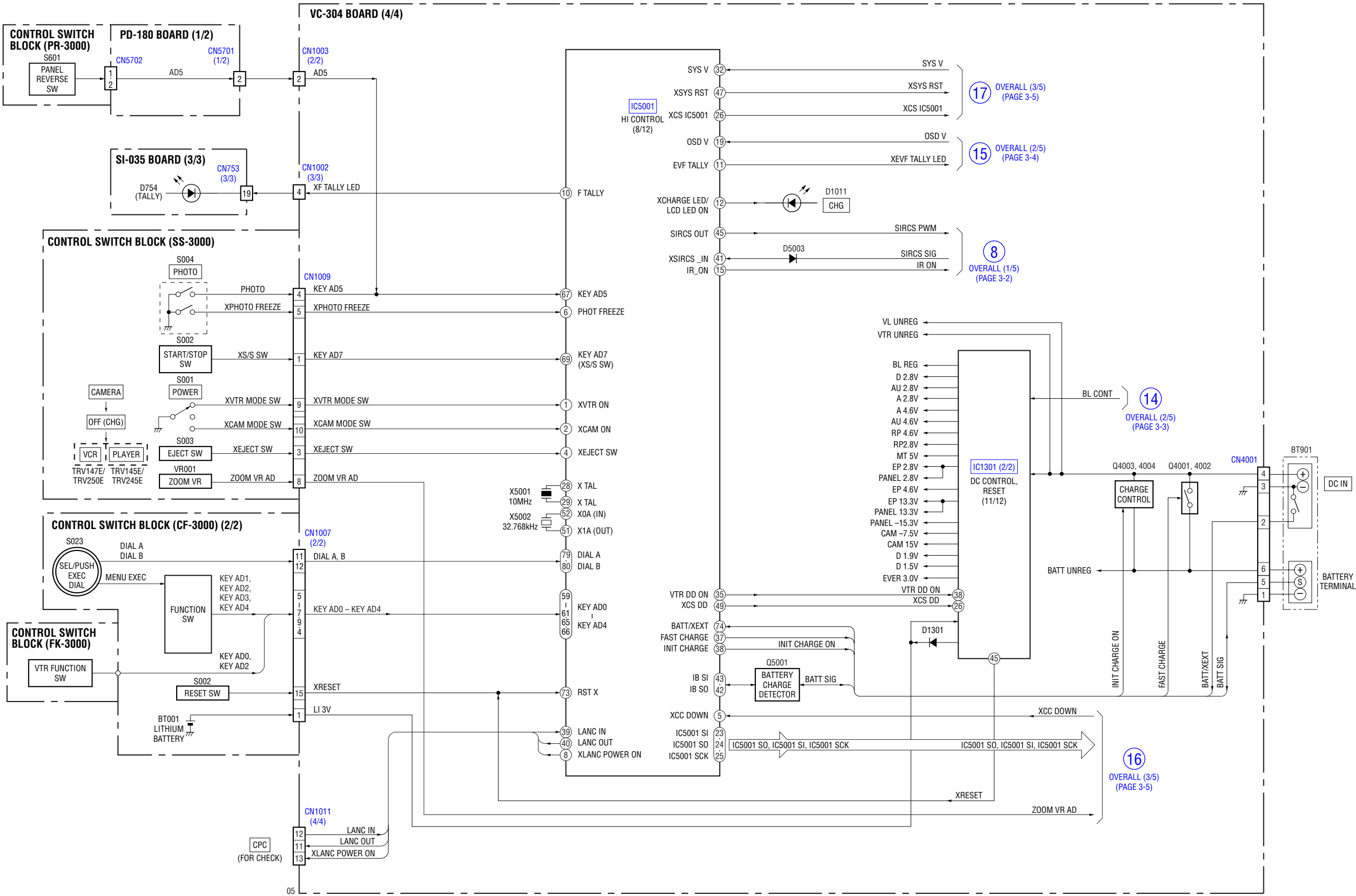
3-3. OVERALL BLOCK DIAGRAM (3/5) () : Number in parenthesis () indicates the division number of schematic diagram where the component is located.





3. BLOCK DIAGRAMS

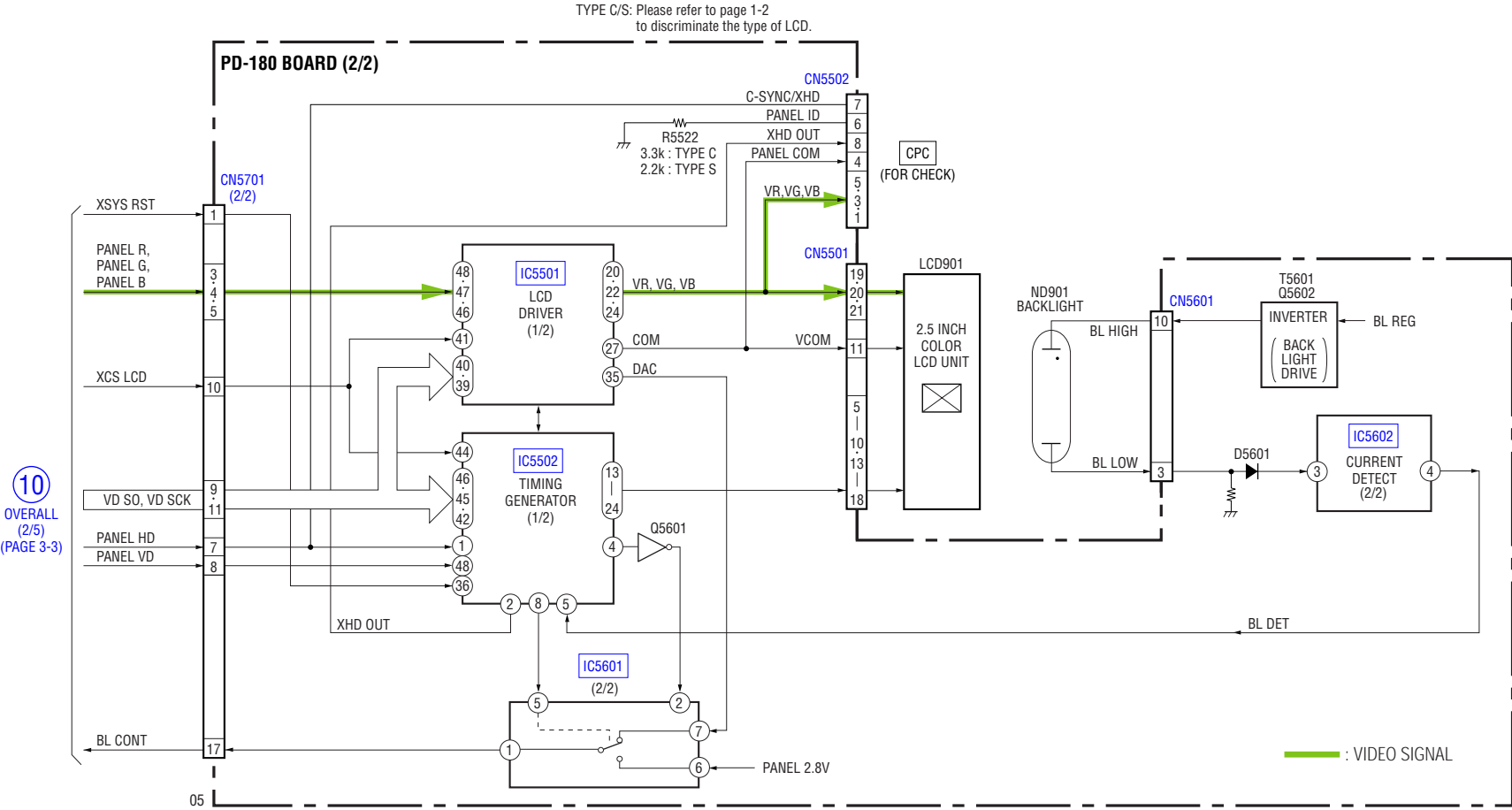
3-4. OVERALL BLOCK DIAGRAM (4/5) () : Number in parenthesis () indicates the division number of schematic diagram where the component is located.





3. BLOCK DIAGRAMS

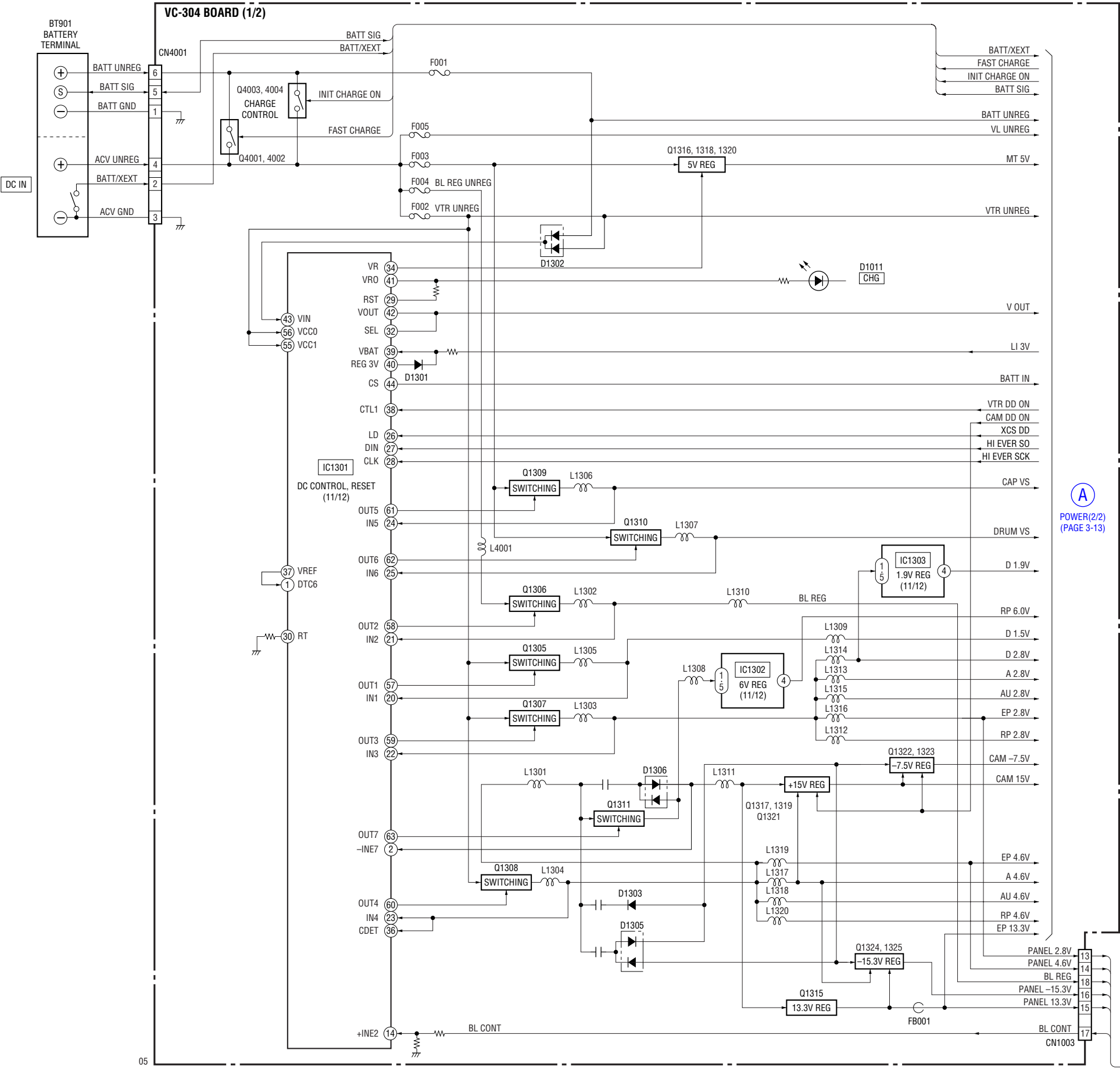
3-5. OVERALL BLOCK DIAGRAM (5/5) () : Number in parenthesis () indicates the division number of schematic diagram where the component is located.



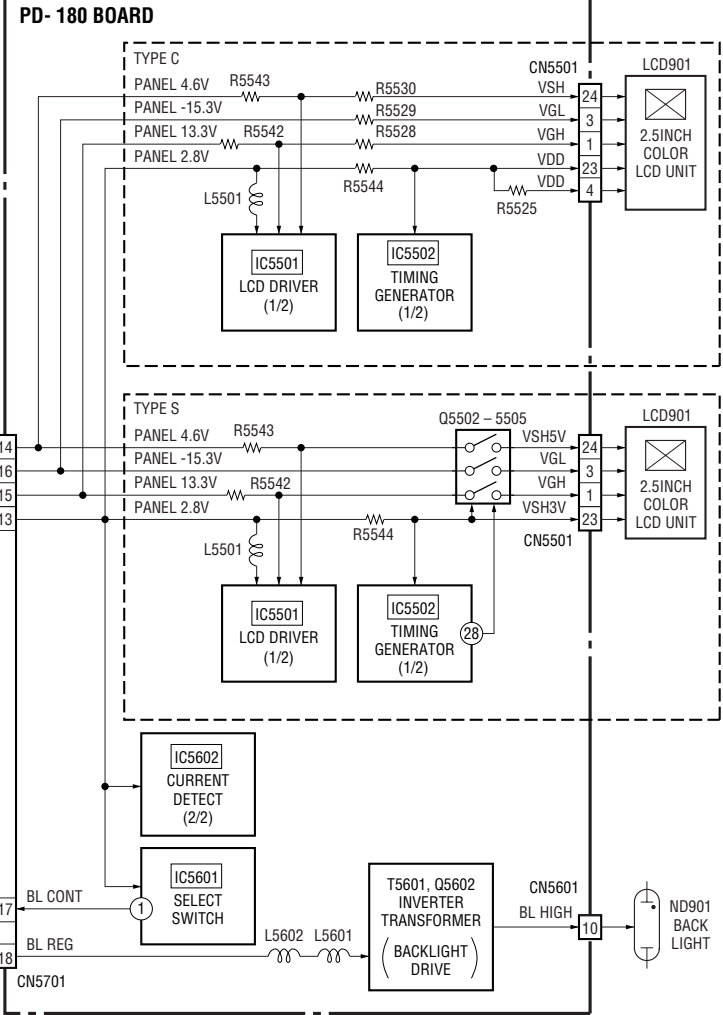


3. BLOCK DIAGRAMS

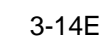
3-6. POWER BLOCK DIAGRAM (1/2) () : Number in parenthesis () indicates the division number of schematic diagram where the component is located.



TYPE C/S: Please refer to page 1-2 to discriminate the type of LCD.

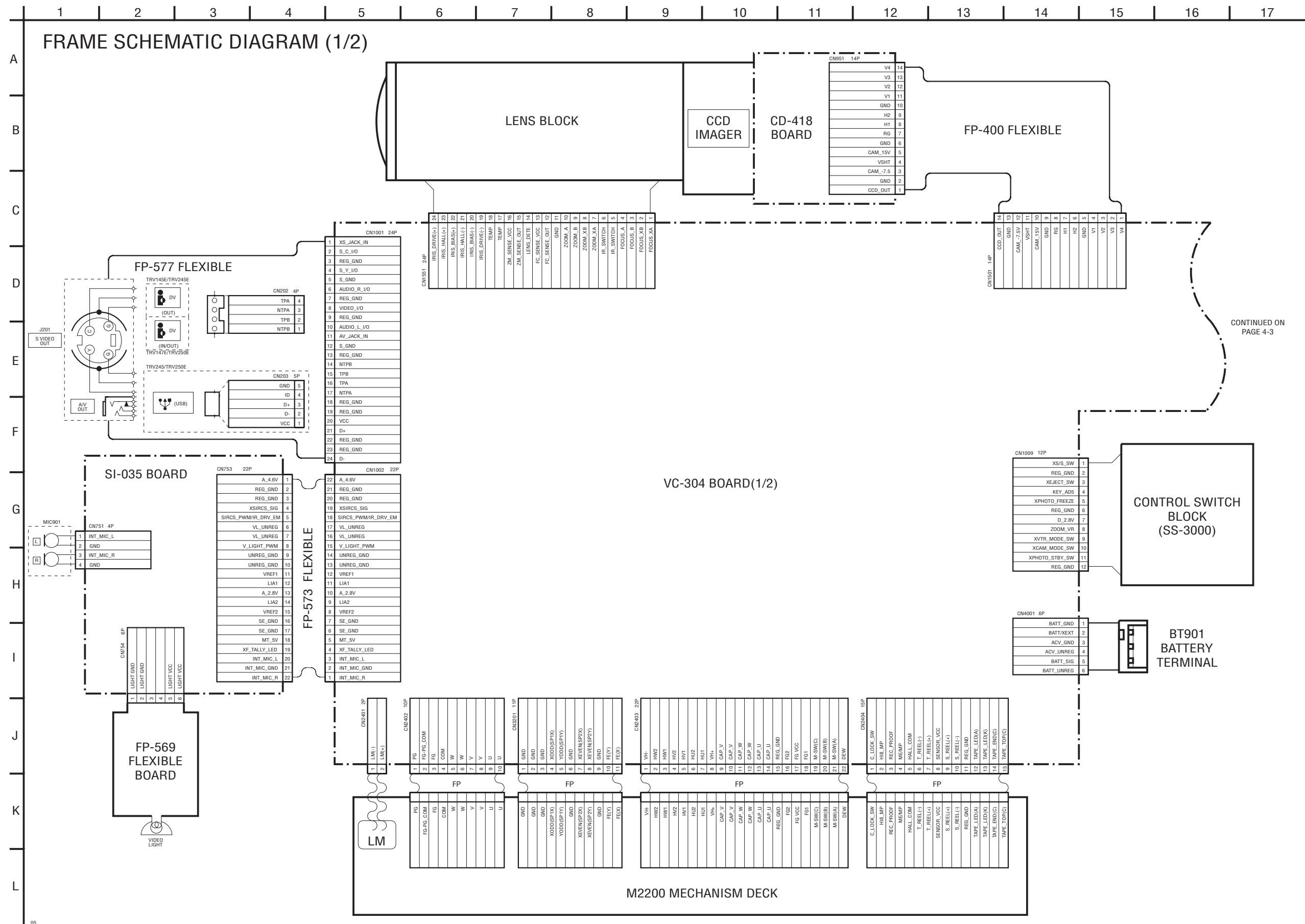


3-7. POWER BLOCK DIAGRAM (2/2) () : Number in parenthesis () indicates the division number of schematic diagram where the component is located.



4-3. PRINTED WIRING BOARDS

4-1. FRAME SCHEMATIC DIAGRAMS

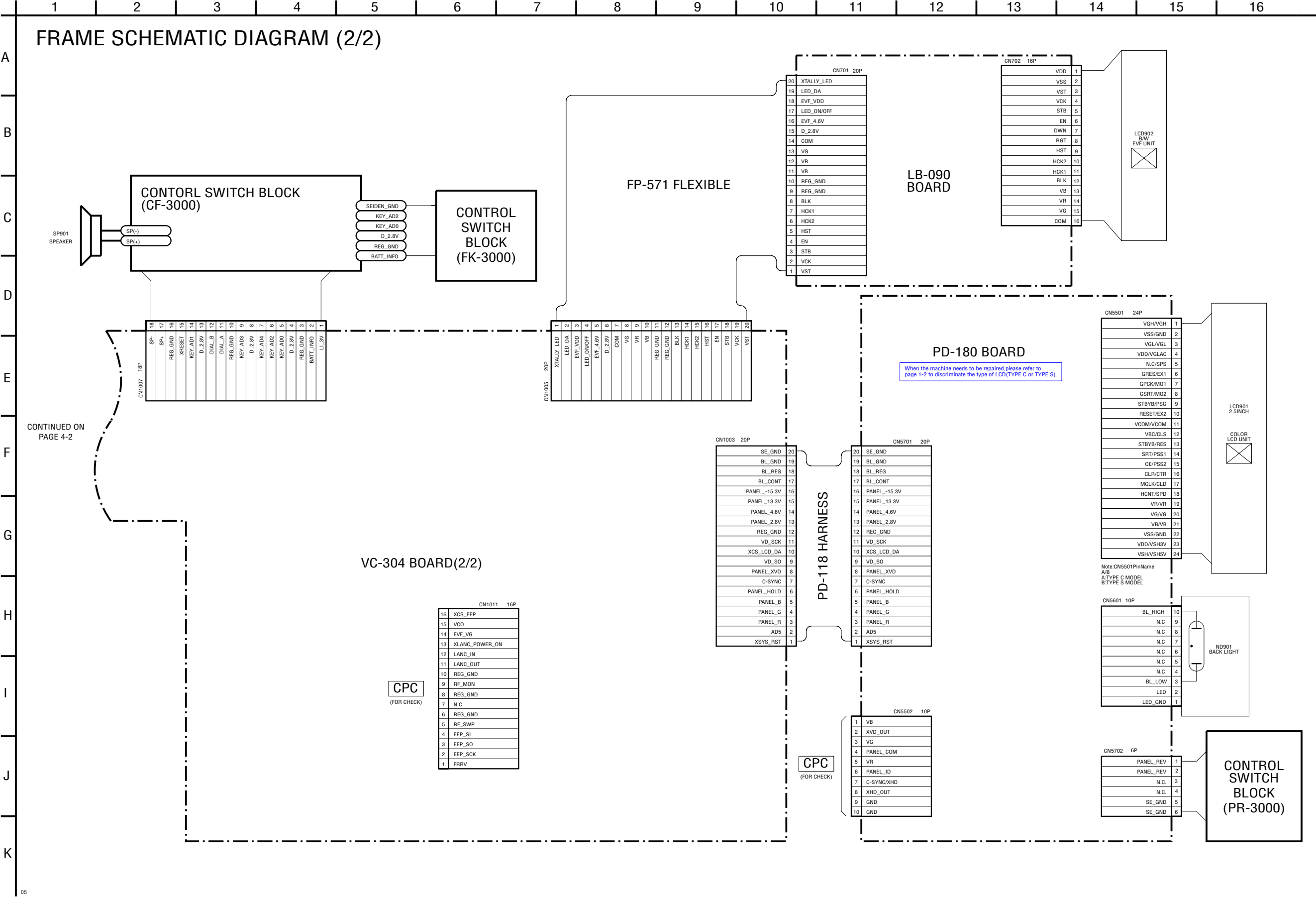




4-2. SCHEMATIC DIAGRAMS

4-3. PRINTED WIRING BOARDS

FRAME SCHEMATIC DIAGRAM (2/2)





4-2. SCHEMATIC DIAGRAMS

4-2. SCHEMATIC DIAGRAMS

THIS NOTE IS COMMON FOR SCHEMATIC DIAGRAMS

(In addition to this, the necessary note is printed in each block)

(For schematic diagrams)

- All capacitors are in μF unless otherwise noted. pF : μF . 50 V or less are not indicated except for electrolytics and tantalums.
- Chip resistors are 1/10 W unless otherwise noted. $\text{k}\Omega=1000\ \Omega$, $\text{M}\Omega=1000\ \text{k}\Omega$.
- Caution when replacing chip parts.
New parts must be attached after removal of chip.
Be careful not to heat the minus side of tantalum capacitor, Because it is damaged by the heat.
- Some chip part will be indicated as follows.

Example	C541	L452
	22U	10UH
	TA A	2520
Kinds of capacitor		
Case size		
External dimensions (mm)		

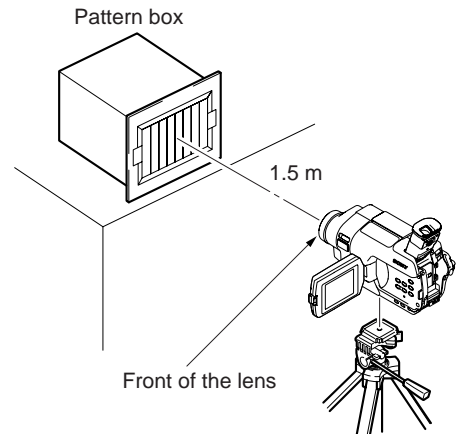
- Constants of resistors, capacitors, ICs and etc with XX indicate that they are not used.
In such cases, the unused circuits may be indicated.
- Parts with ★ differ according to the model/destination. Refer to the mount table for each function.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.
- Signal name
XEDIT → EDIT PB/XREC → PB/REC
- : non flammable resistor
- : fusible resistor
- : panel designation
- : B+ Line
- : B- Line
- : IN/OUT direction of (+,-) B LINE.
- : adjustment for repair.
- : VIDEO SIGNAL (ANALOG)
- : AUDIO SIGNAL (ANALOG)
- : VIDEO/AUDIO SIGNAL
- : VIDEO/AUDIO/SERVO SIGNAL
- : VIDEO/SERVO SIGNAL
- : SERVO SIGNAL
- Circled numbers refer to waveforms.

(Measuring conditions voltage and waveform)

- Voltages and waveforms are measured between the measurement points and ground when camera shoots color bar chart of pattern box. They are reference values and reference waveforms.
(VOM of DC 10 $\text{M}\Omega$ input impedance is used)
- Voltage values change depending upon input impedance of VOM used.)

Note : The components identified by mark \triangle or dotted line with mark \triangle are critical for safety. Replace only with part number specified.

1. Connection



2. Adjust the distance so that the output waveform of Fig. a and the Fig. b can be obtain.

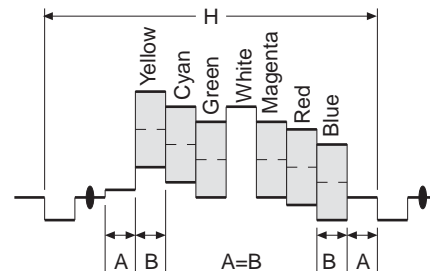


Fig. a (Video output terminal output waveform)

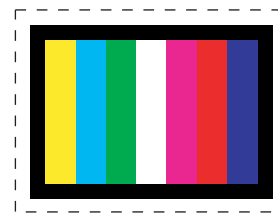


Fig.b (Picture on monitor TV)

When indicating parts by reference number, please include the board name.



4-2. SCHEMATIC DIAGRAMS

Link

• CD-418 BOARD (CCD IMAGER)	• VC-304 BOARD (11/12) (DC CONTROL)
• VC-304 BOARD (1/12) (A/D CONVERTER, TIMING GENERATOR)	• VC-304 BOARD (12/12) (CONNECTOR)
• VC-304 BOARD (2/12) (DV SIGNAL PROCESS)	• PD-180 BOARD (1/2) (RGB DRIVE, TIMING GENERATOR)
• VC-304 BOARD (3/12) (DV INTERFACE, VIDEO OUT)	• PD-180 BOARD (2/2) (BACKLIGHT DRIVE)
• VC-304 BOARD (4/12) (LENS DRIVE)	• LB-090 BOARD (EVF, EVF BACKLIGHT)
• VC-304 BOARD (5/12) (REC/PB AMP)	• SI-035 BOARD (STEADYSHOT, MIC) FP-569 FLEXIBLE BOARD
• VC-304 BOARD (6/12) (SERVO)	• FP-577 FLEXIBLE BOARD
• VC-304 BOARD (7/12) (CAMERA/MECHA CONTROL)	• LS-057 BOARD (S/T REEL SENSOR) FP-228, FP-299, FP-300, FP-301, FP-302 FLEXIBLE BOARD
• VC-304 BOARD (8/12) (HI CONTROL)	• CONTROL SWITCH BLOCK (CF-3000, FK-3000)
• VC-304 BOARD (9/12) (EVF DRIVE)	• CONTROL SWITCH BLOCK (SS-3000, PR-3000)
• VC-304 BOARD (10/12) (AUDIO PROCESS)	

• COMMON NOTE FOR SCHEMATIC DIAGRAMS

• WAVEFORMS

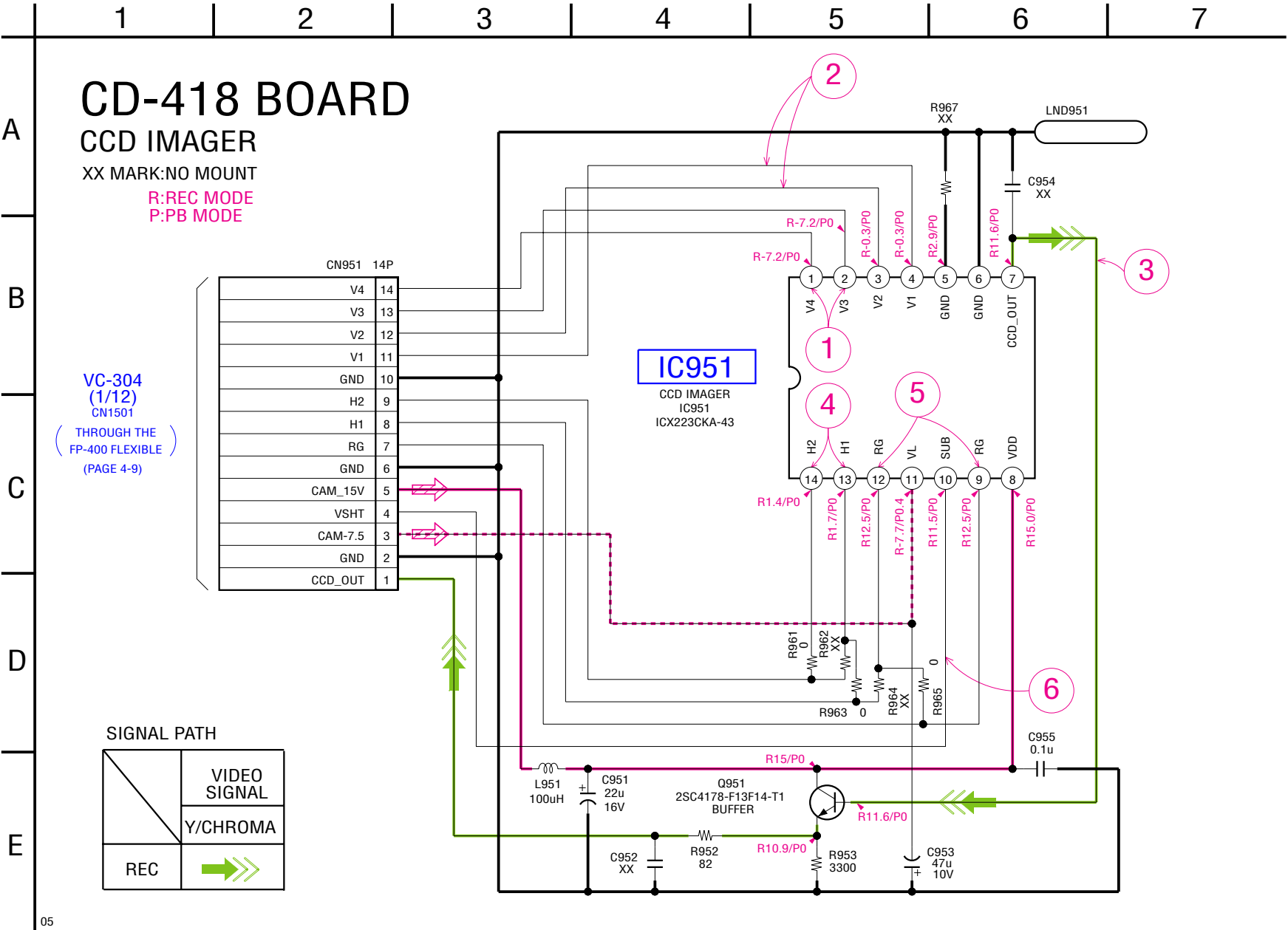


4-2. SCHEMATIC DIAGRAMS

CD-418 BOARD

For Schematic Diagram

- Refer to page 4-49 for printed wiring board.
- Refer to page 4-65 for waveforms.

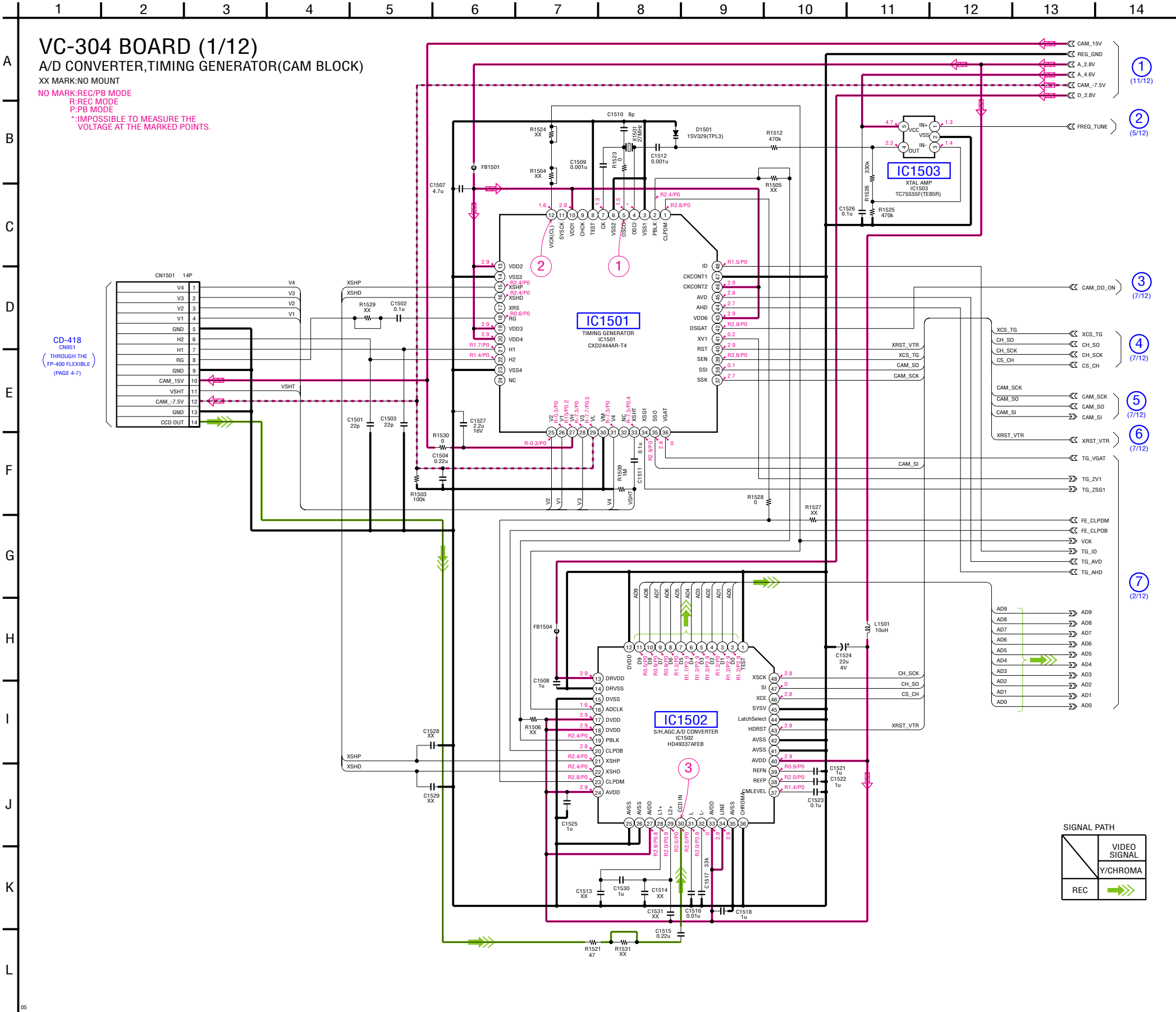


Precautions for Replacement of CCD Imager

- The CD-418 board mounted as a repair part is not equipped with a CCD imager.
When replacing this board, remove the CCD imager from the old one and mount it onto the new one.
- If the CCD imager has been replaced, carry out all the adjustments for the camera section.
- As the CCD imager may be damaged by static electricity from its structure, handle it carefully like for the MOS IC.
In addition, ensure that the receiver is not covered with dusts nor exposed to strong light.

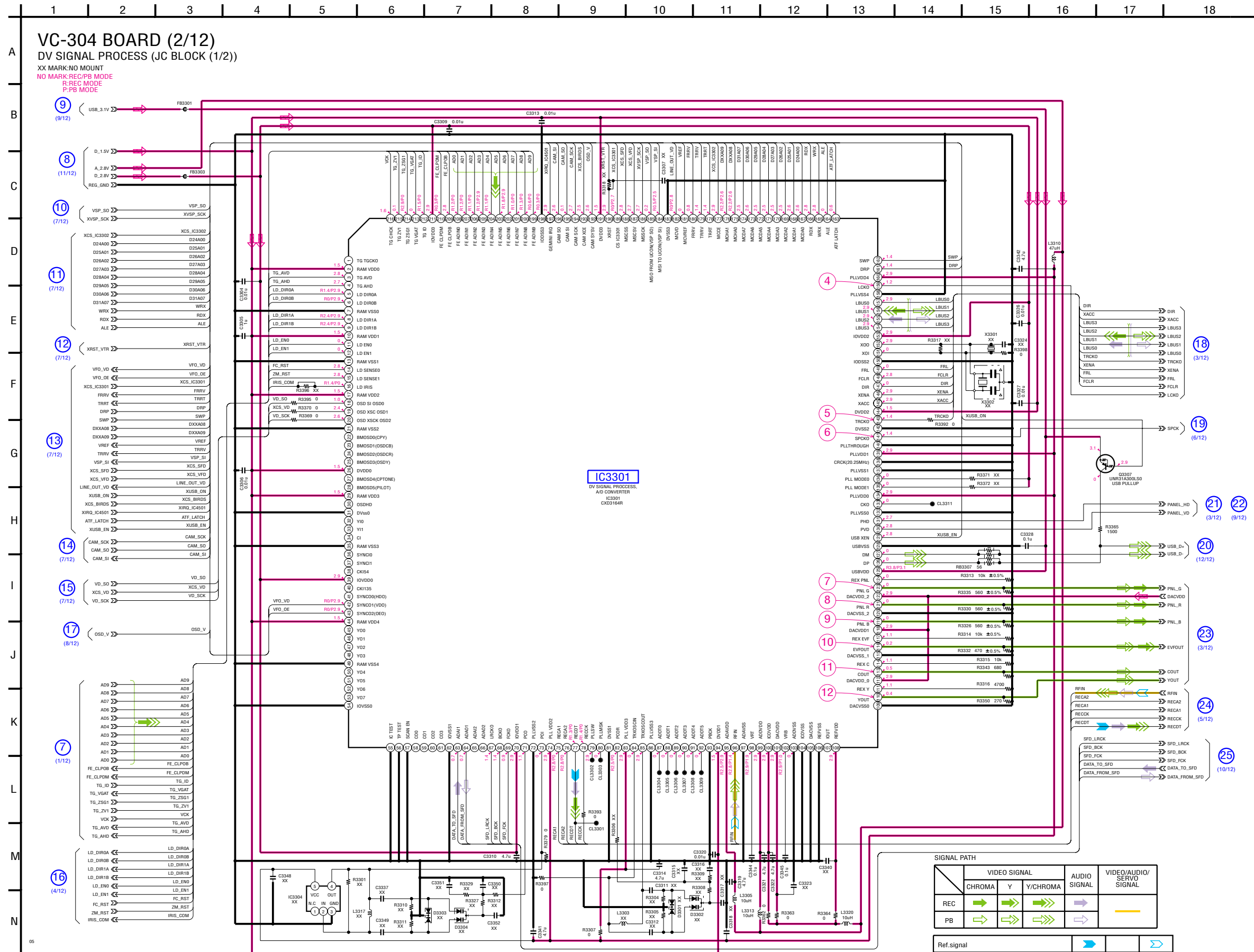
VC-304 BOARD SIDE B

- Refer to page 4-51 for printed wiring board.
- Refer to page 4-66 for waveforms.



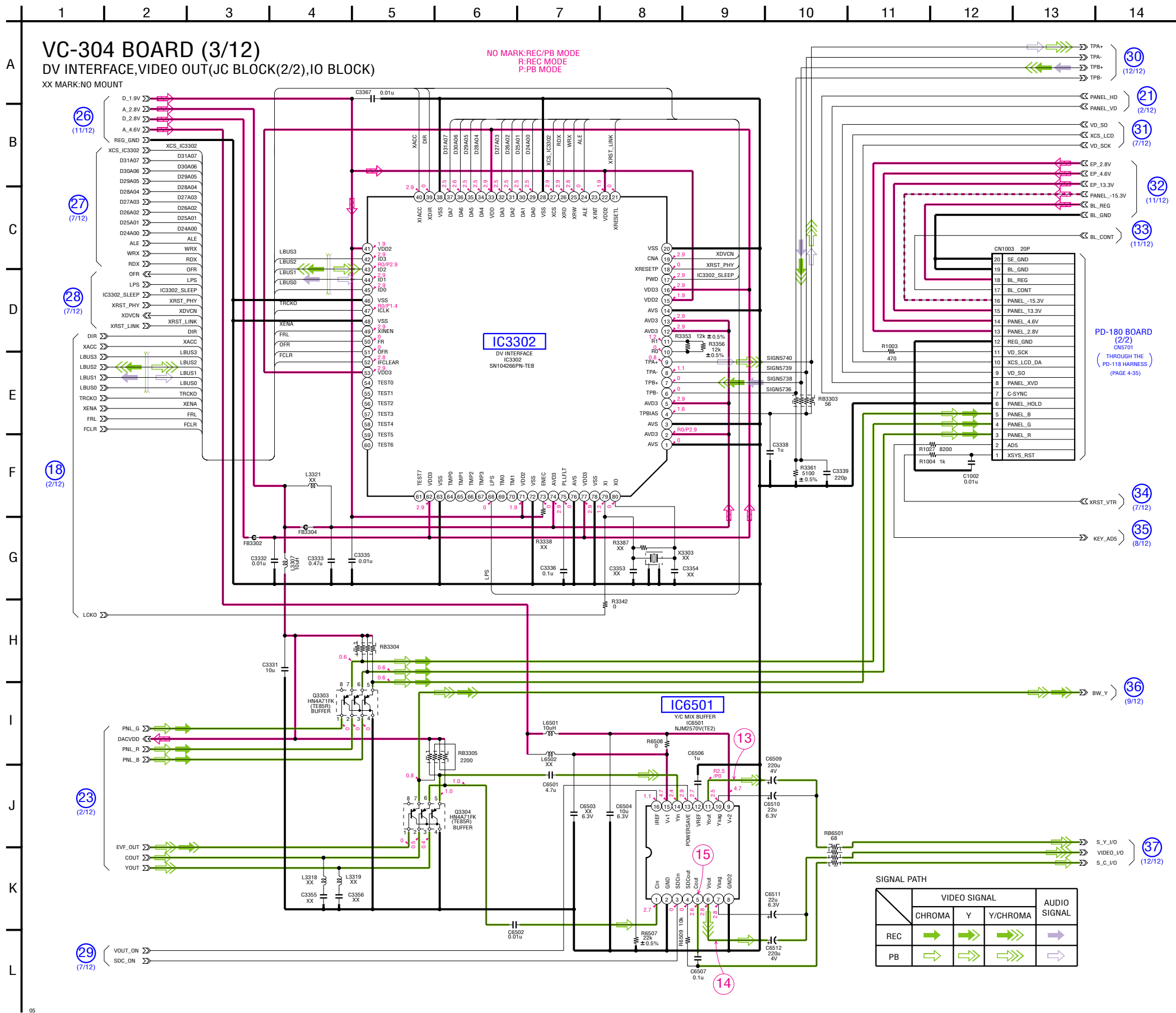
VC-304 BOARD SIDE B

- Refer to page 4-51 for printed wiring board.
- Refer to page 4-66, 4-67 for waveforms.



VC-304 BOARD SIDE B

- Refer to page 4-51 for printed wiring board.
- Refer to page 4-67 for waveforms.



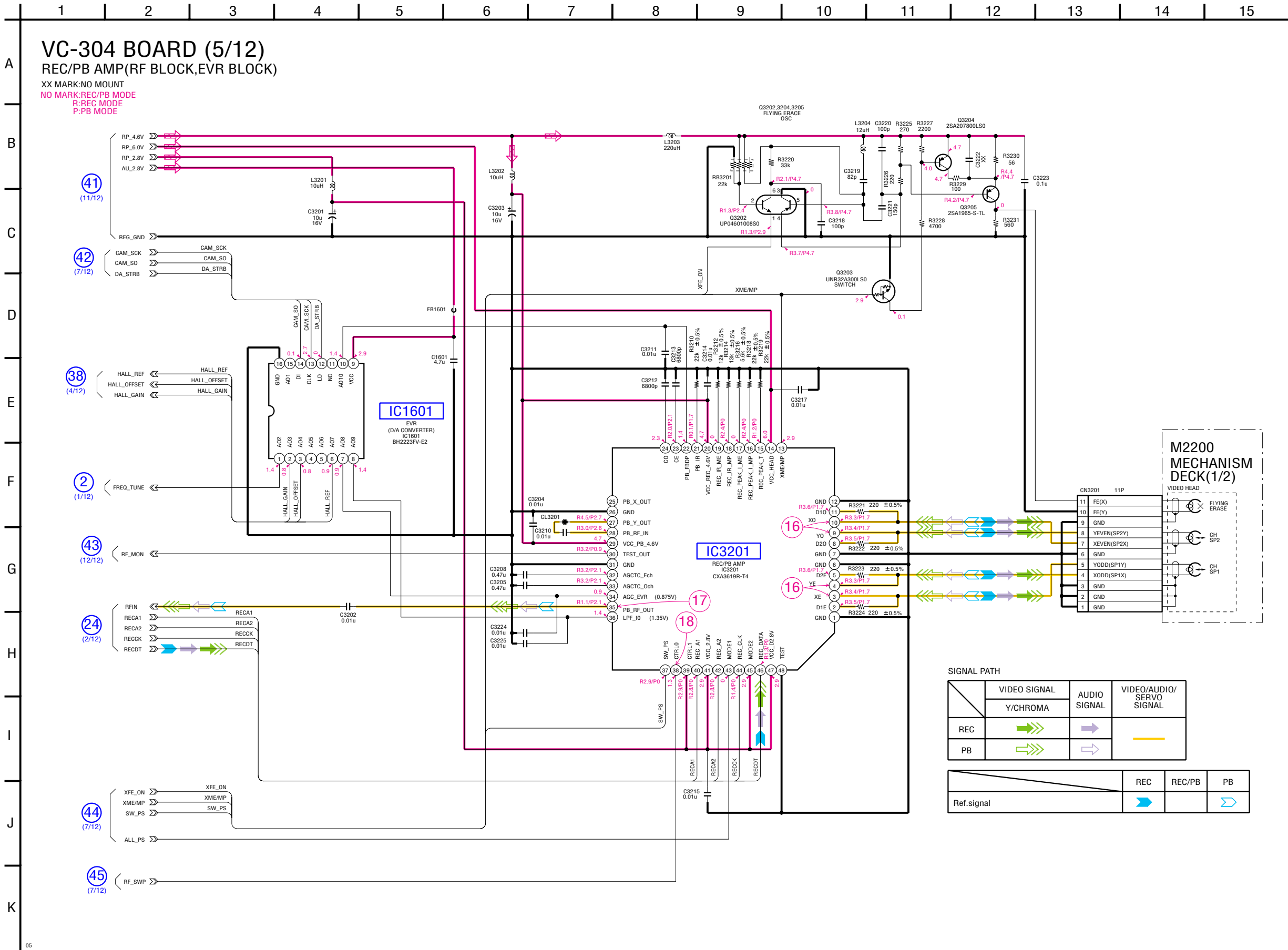
VC-304 BOARD SIDE B

- Refer to page 4-51 for printed wiring board.





For Schematic Diagram
• Refer to page 4-51 for printed wiring board.
• Refer to page 4-67 for waveforms.





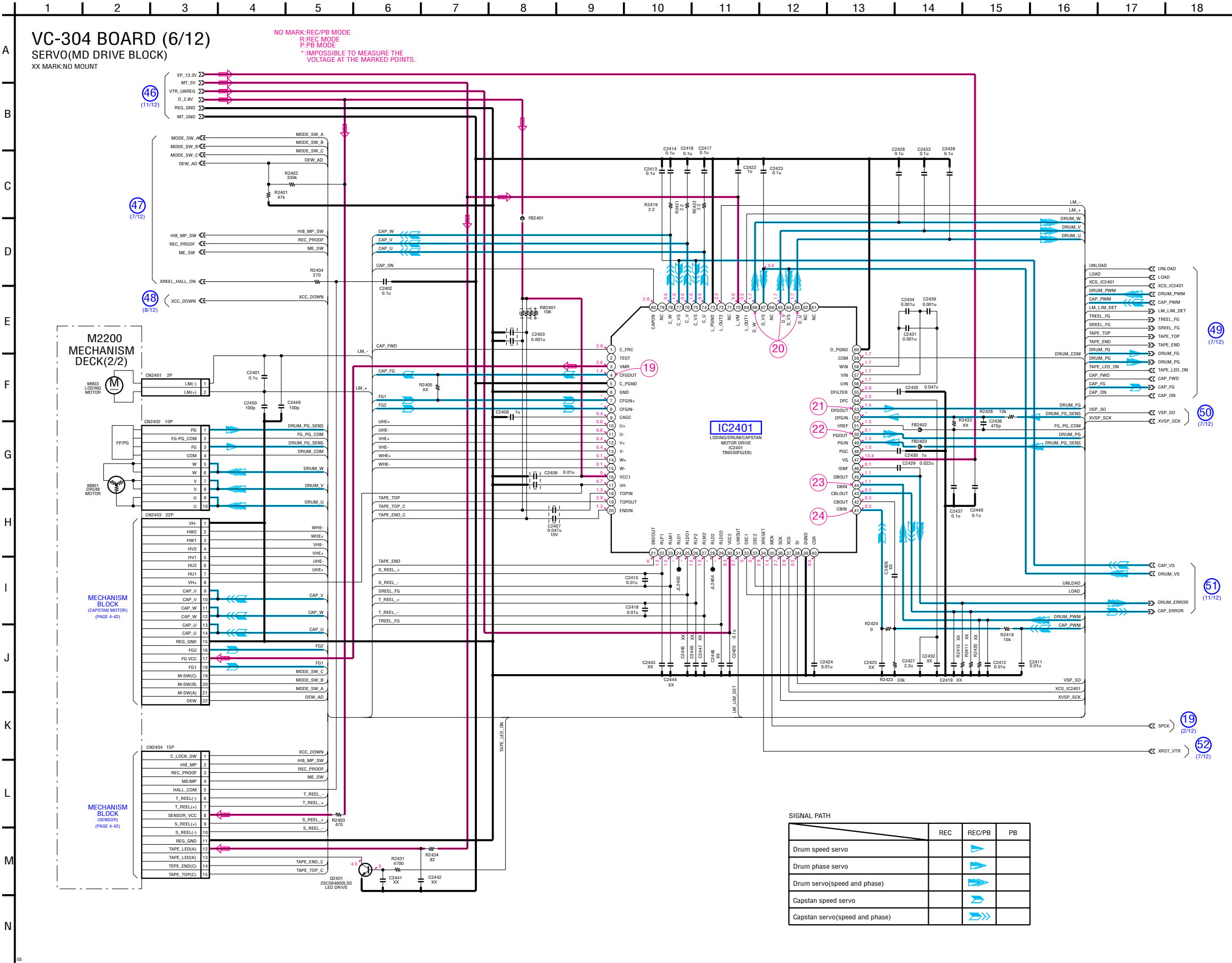
4-2. SCHEMATIC DIAGRAMS

VC-304 BOARD SIDE A

VC-304 BOARD SIDE B

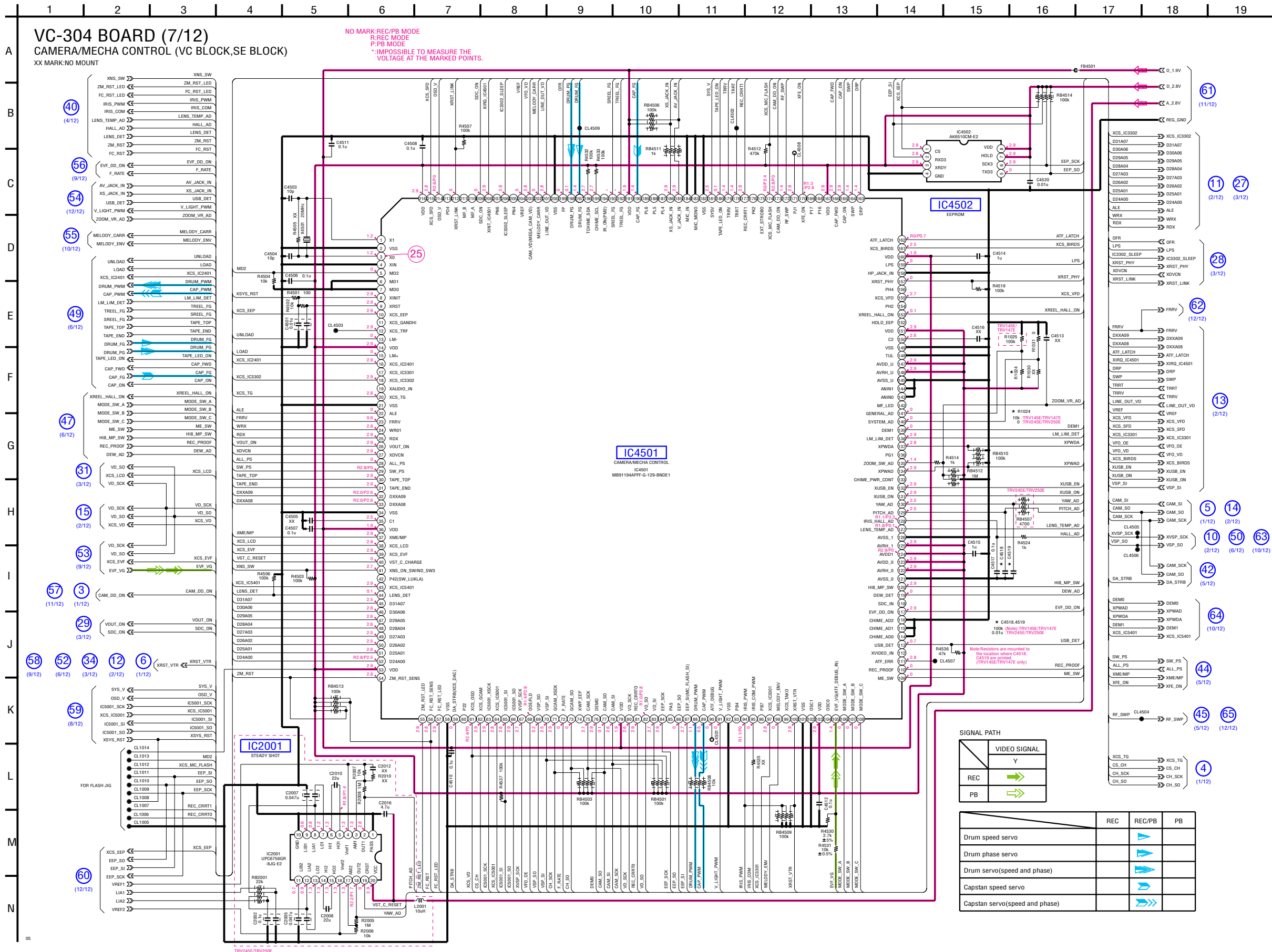
For Schematic Diagram

- Refer to page 4-51 for printed wiring board.
- Refer to page 4-67, 4-68 for waveforms.



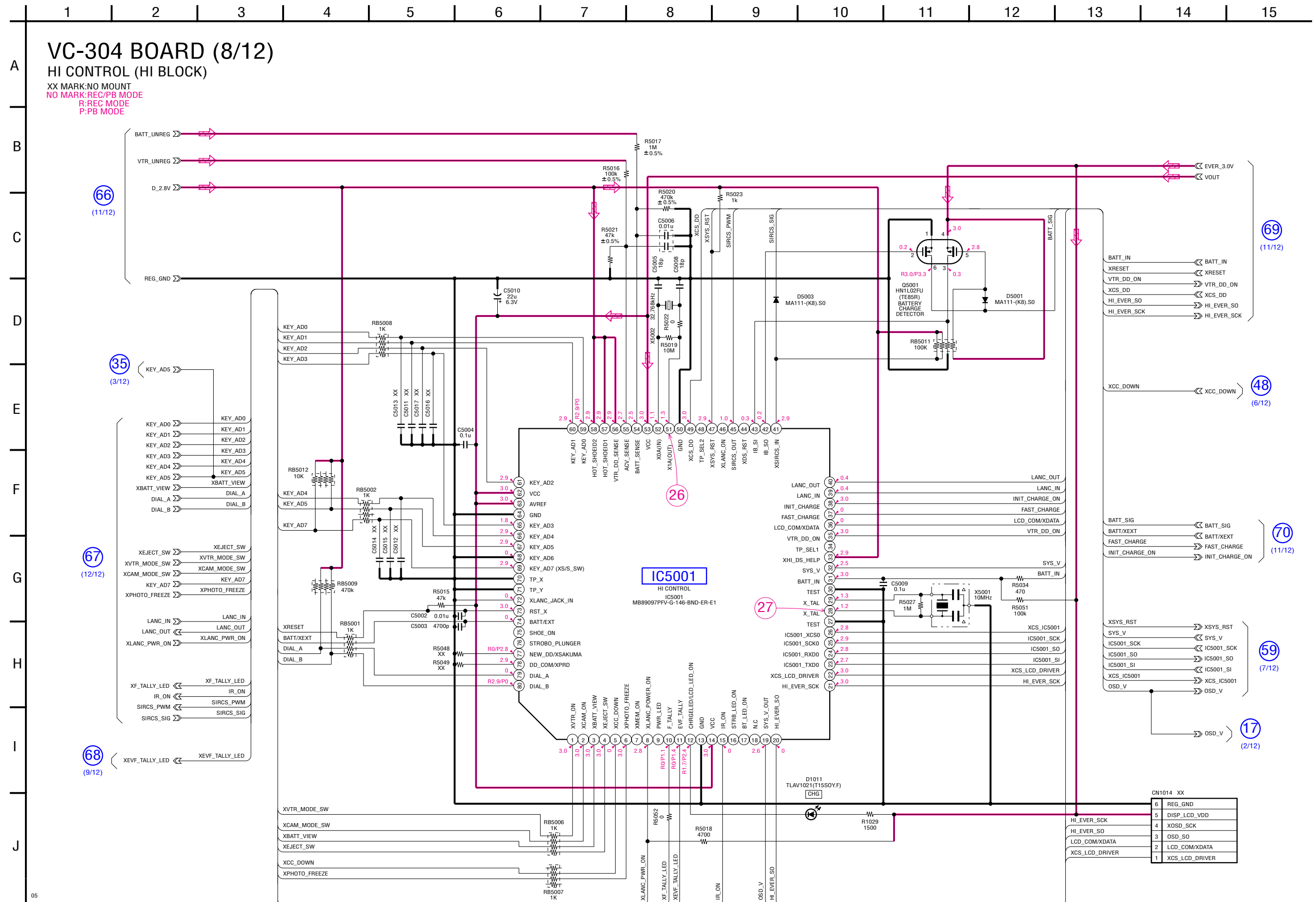
VC-304 BOARD SIDE B

- Refer to page 4-51 for printed wiring board.
- Refer to page 4-68 for waveforms.



VC-304 BOARD SIDE B

- Refer to page 4-51 for printed wiring board.
- Refer to page 4-68 for waveforms.





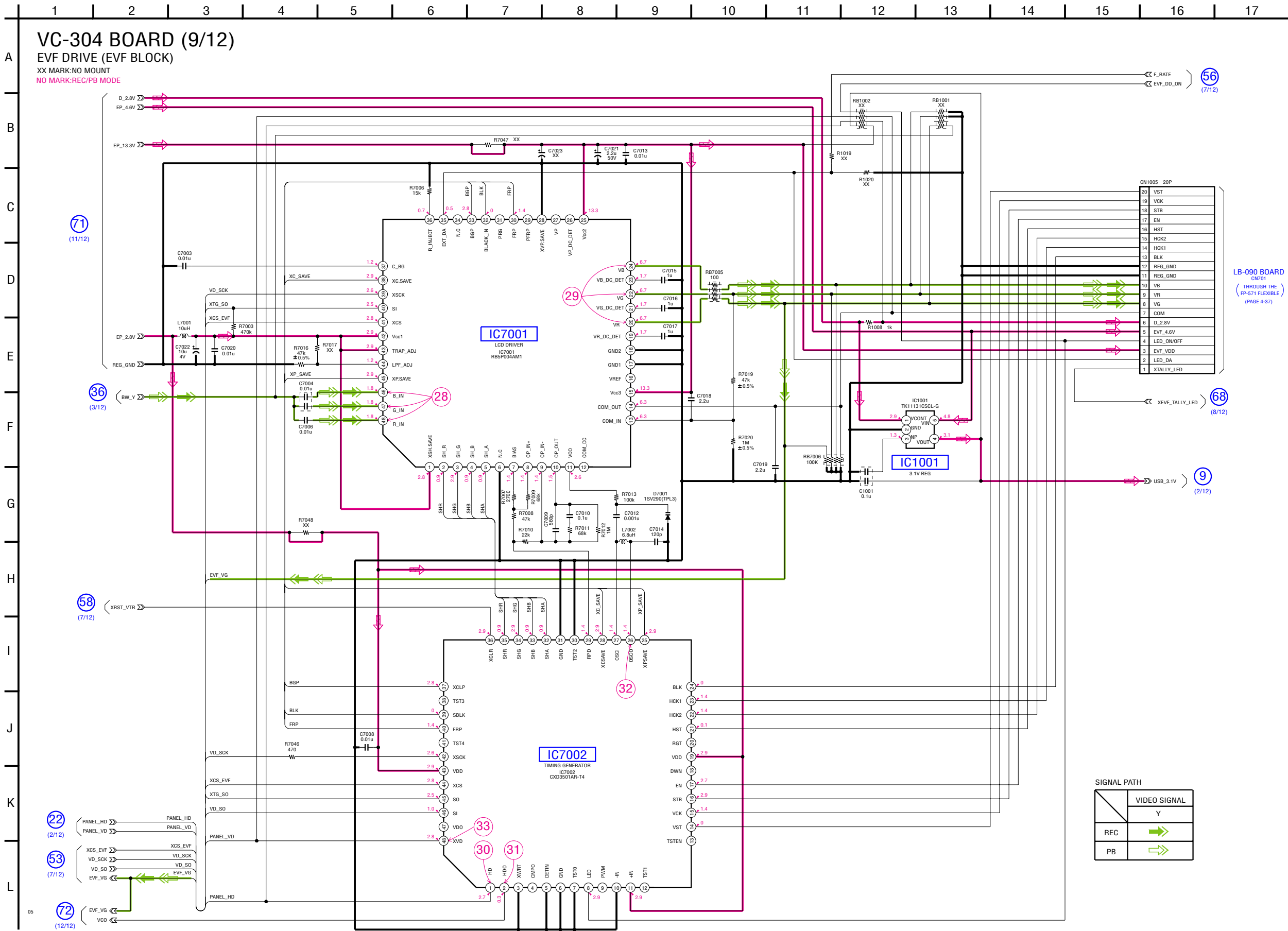
4-2. SCHEMATIC DIAGRAMS

VC-304 BOARD SIDE A

VC-304 BOARD SIDE B

For Schematic Diagram

- Refer to page 4-51 for printed wiring board.
- Refer to page 4-68, 4-69 for waveforms.



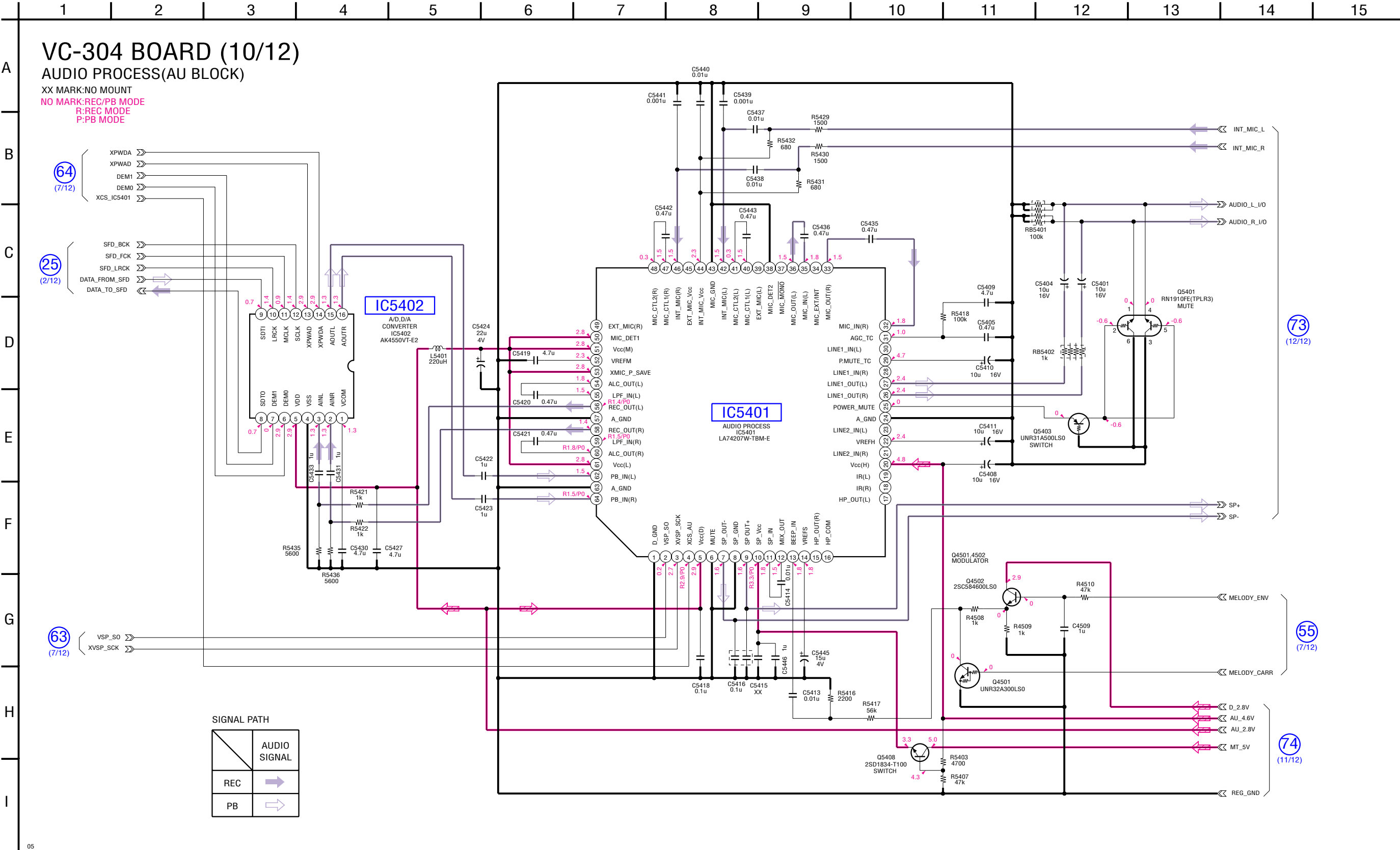


4-2. SCHEMATIC DIAGRAMS

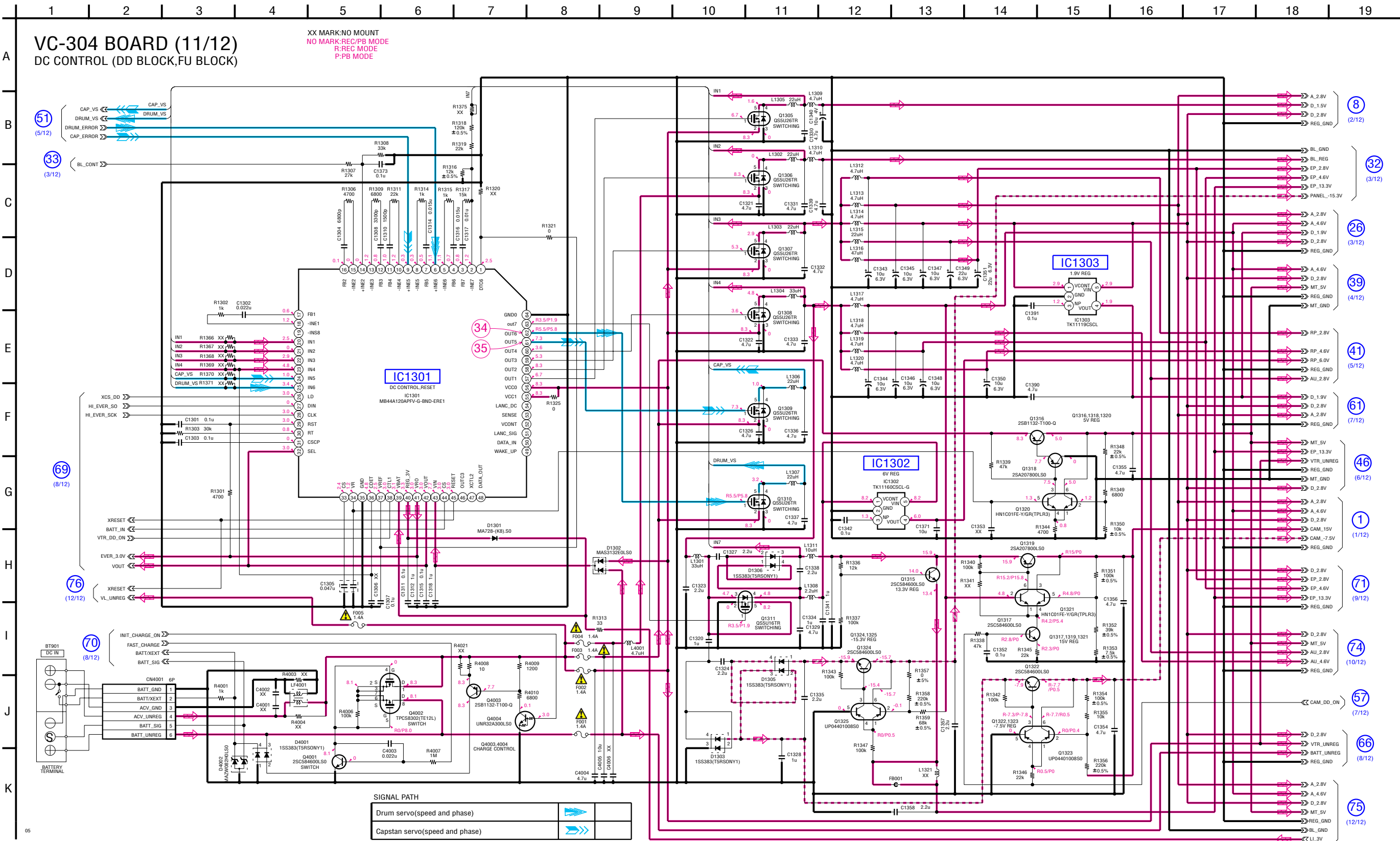
VC-304 BOARD SIDE A


VC-304 BOARD SIDE B

For Schematic Diagram
• Refer to page 4-51 for printed wiring board.



- Refer to page 4-51 for printed wiring board.
- Refer to page 4-69 for waveforms.



The components identified by mark  or dotted line with mark are critical for safety.
Replace only with part number specified.

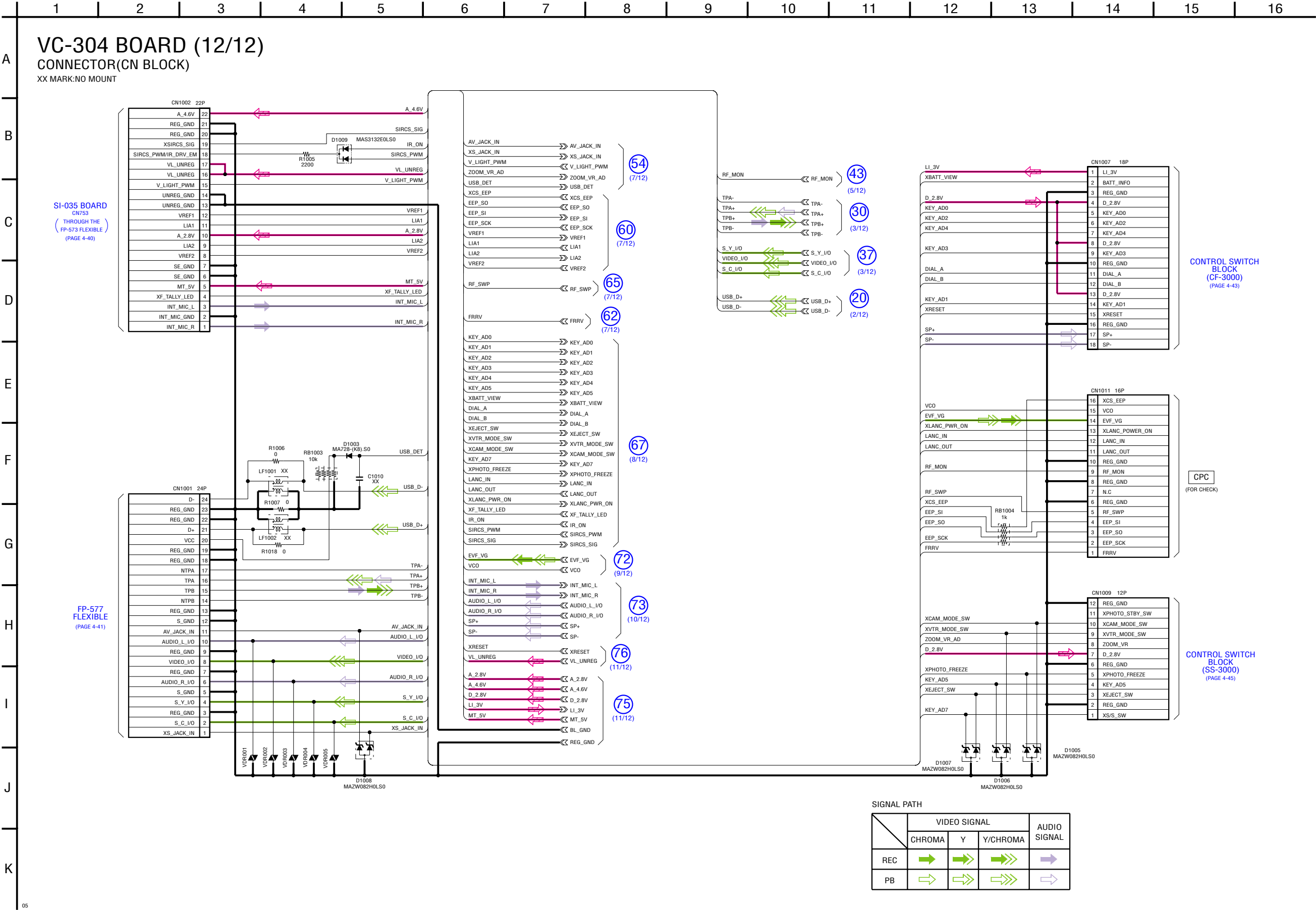


4-2. SCHEMATIC DIAGRAMS

VC-304 BOARD SIDE A

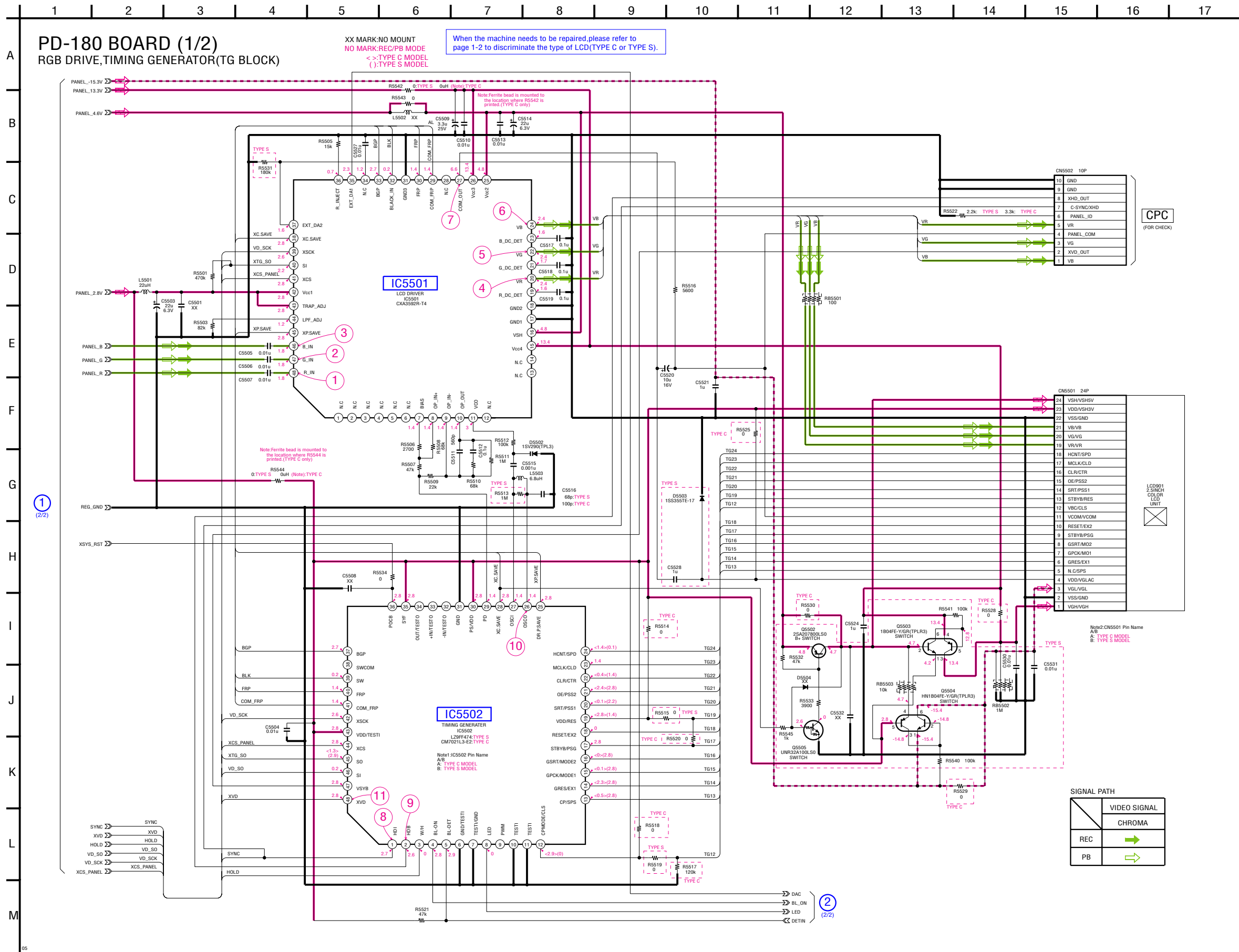
VC-304 BOARD SIDE B

For Schematic Diagram
• Refer to page 4-51 for printed wiring board.



PD-180 BOARD SIDE B

- Refer to page 4-55 for printed wiring board.
- Refer to page 4-70, 4-71 for waveforms.





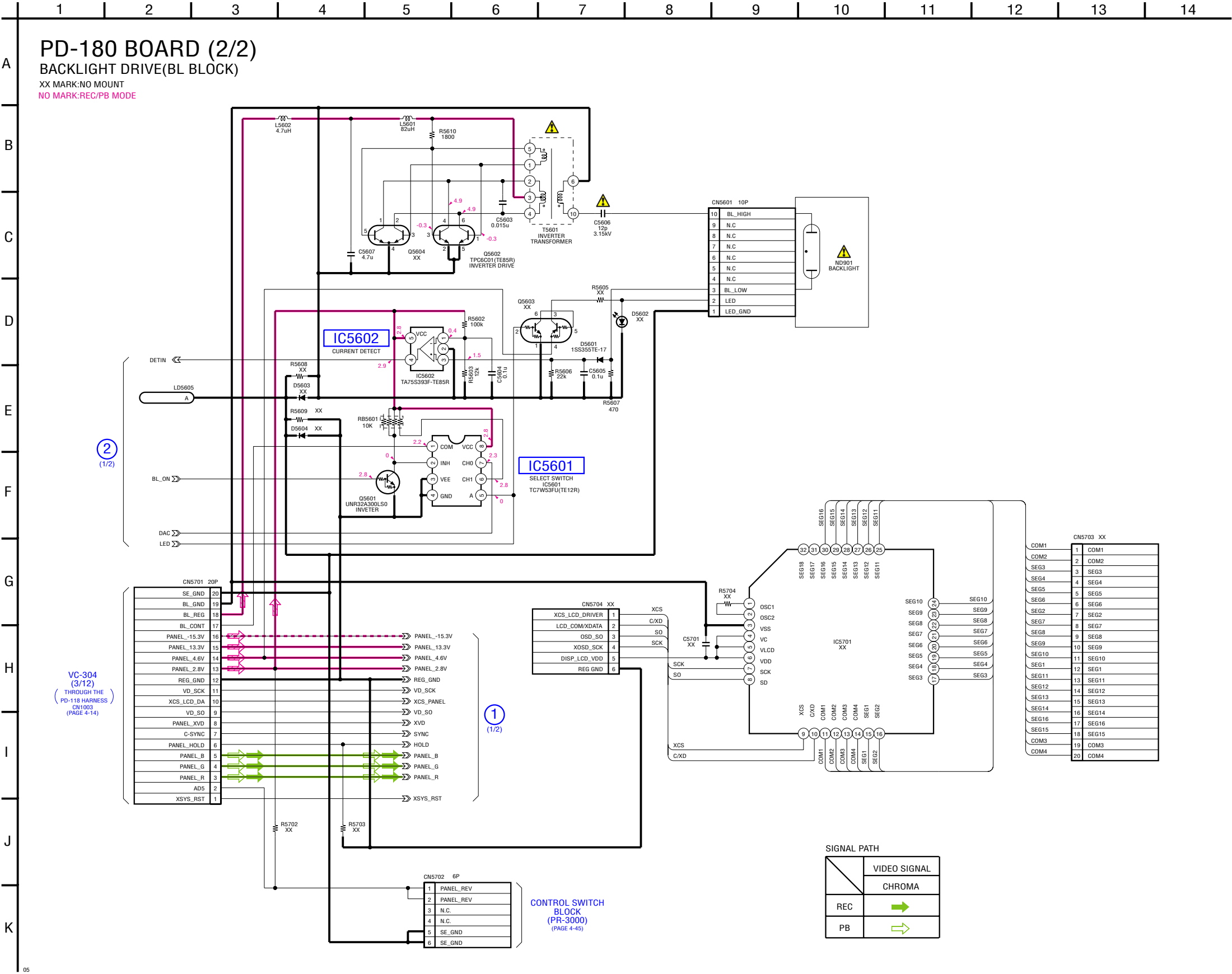
4-2. SCHEMATIC DIAGRAMS

PD-180 BOARD SIDE A

PD-180 BOARD SIDE B

For Schematic Diagram

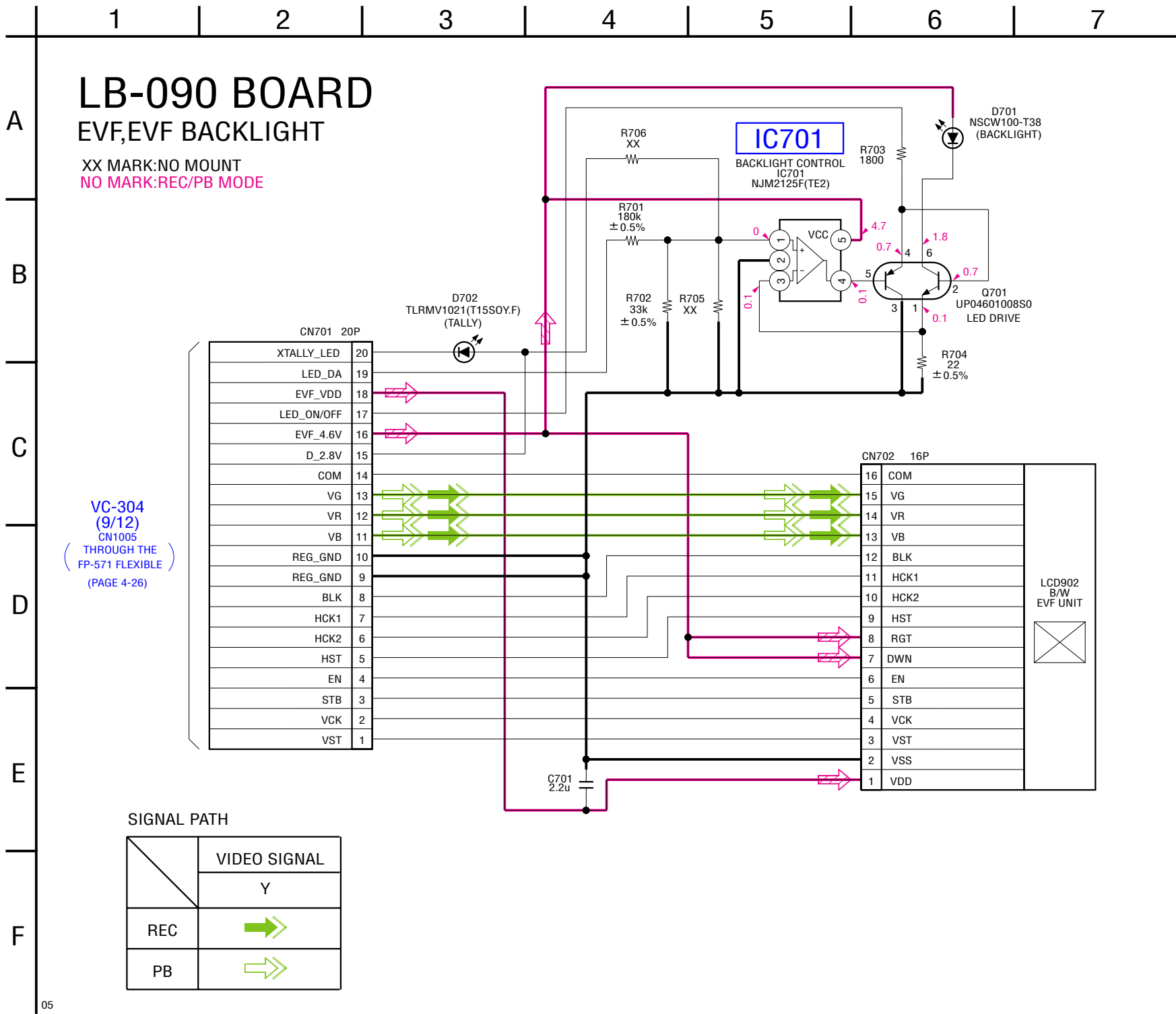
• Refer to page 4-55 for printed wiring board.



The components identified by mark \triangle or dotted line with mark \triangle are critical for safety.
Replace only with part number specified.



For Schematic Diagram
• Refer to page 4-59 for printed wiring board.



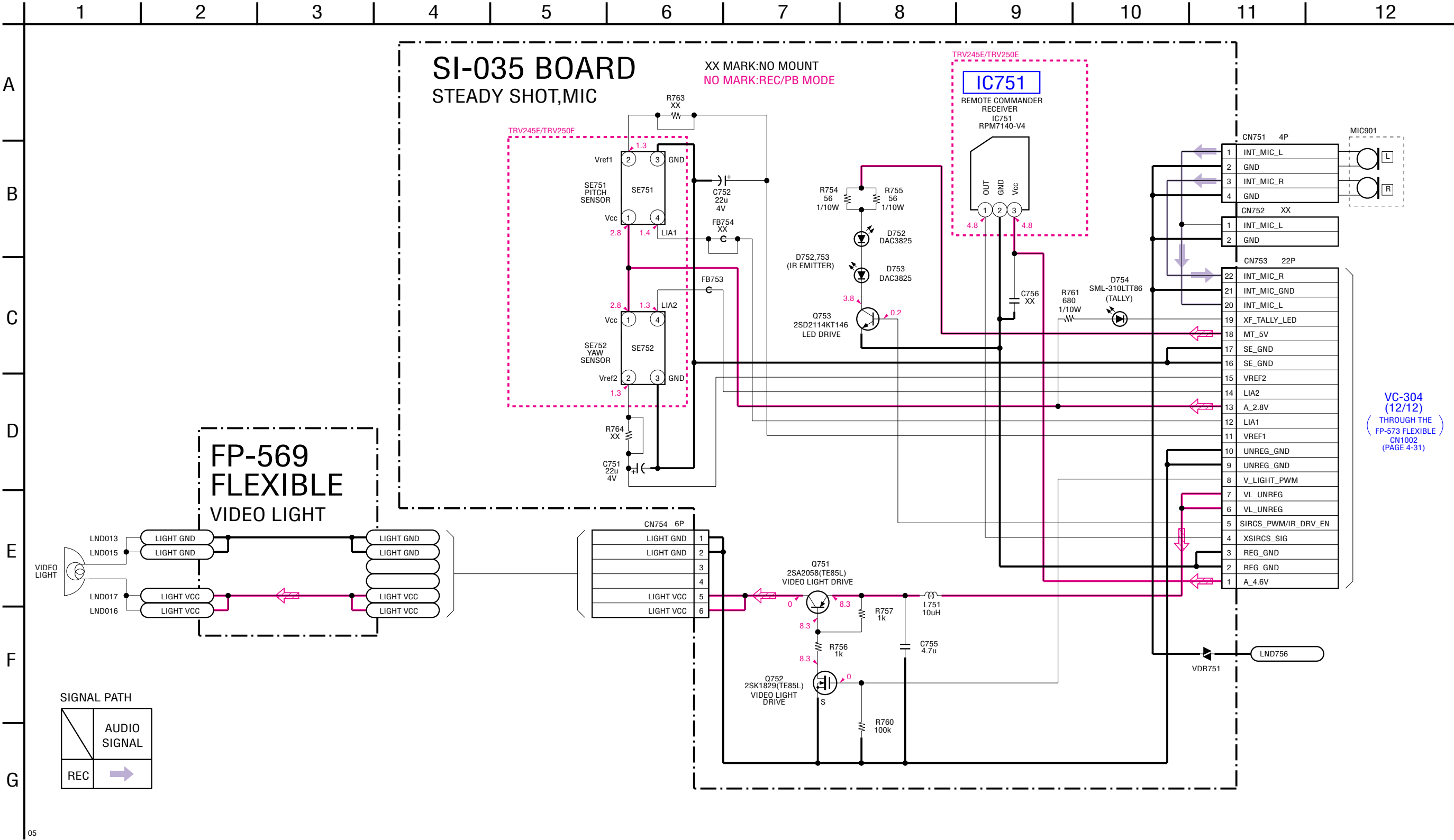


4-2. SCHEMATIC DIAGRAMS

SI-035 BOARD

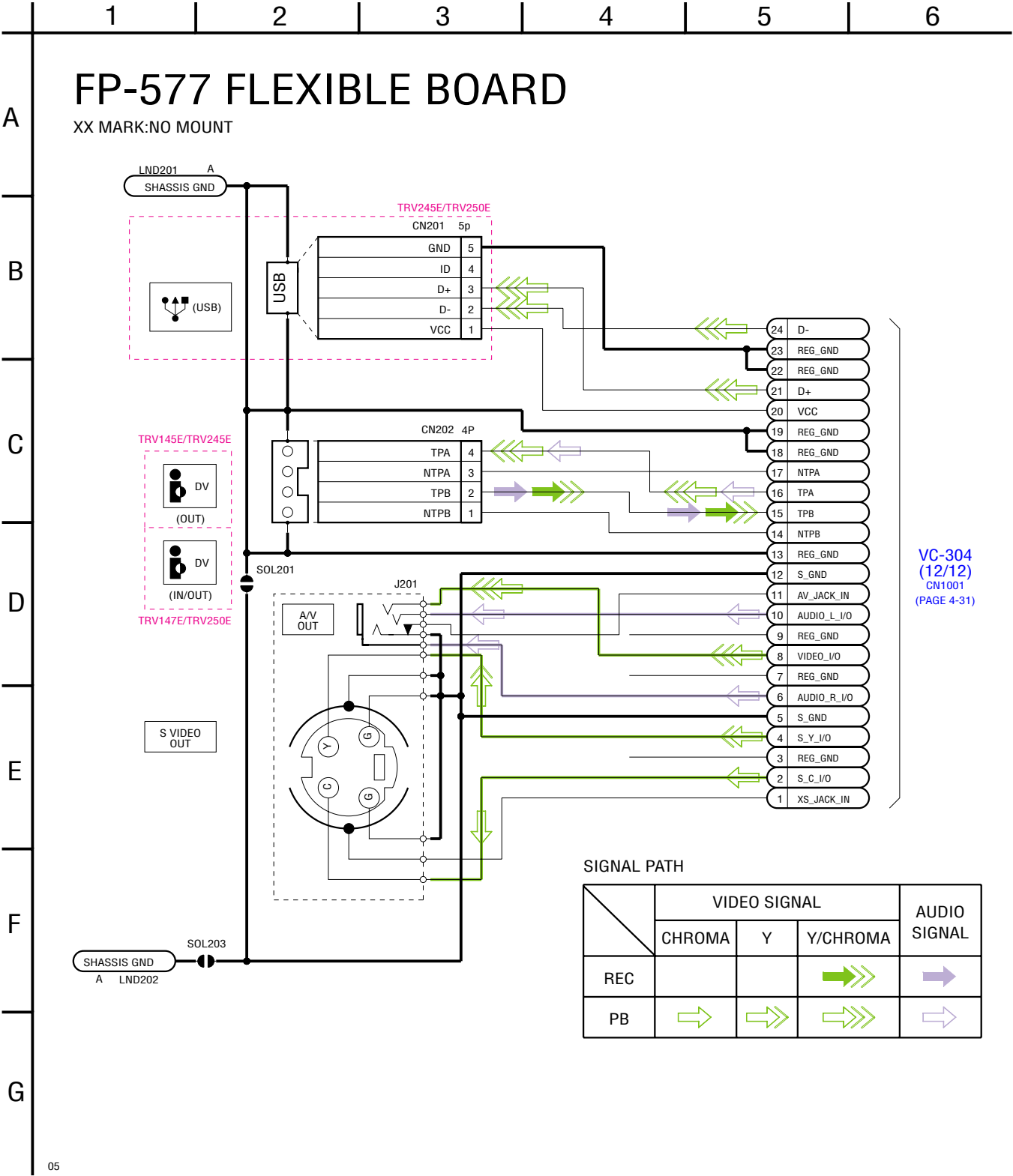
FP-569 FLEXIBLE BOARD

For Schematic Diagram
• Refer to page 4-61, 63 for printed wiring board.

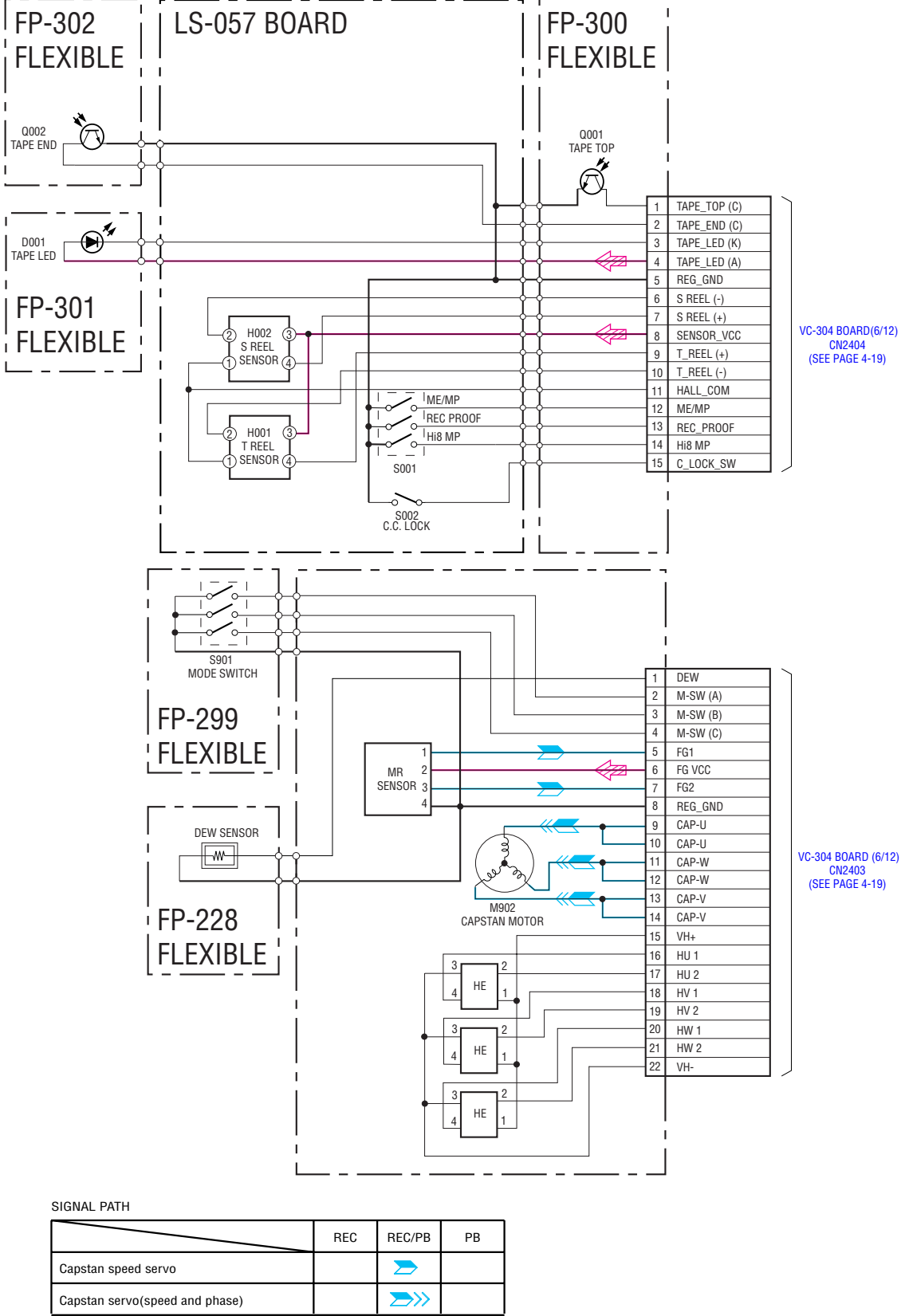




For Schematic Diagram
• Refer to page 4-63 for printed wiring board.

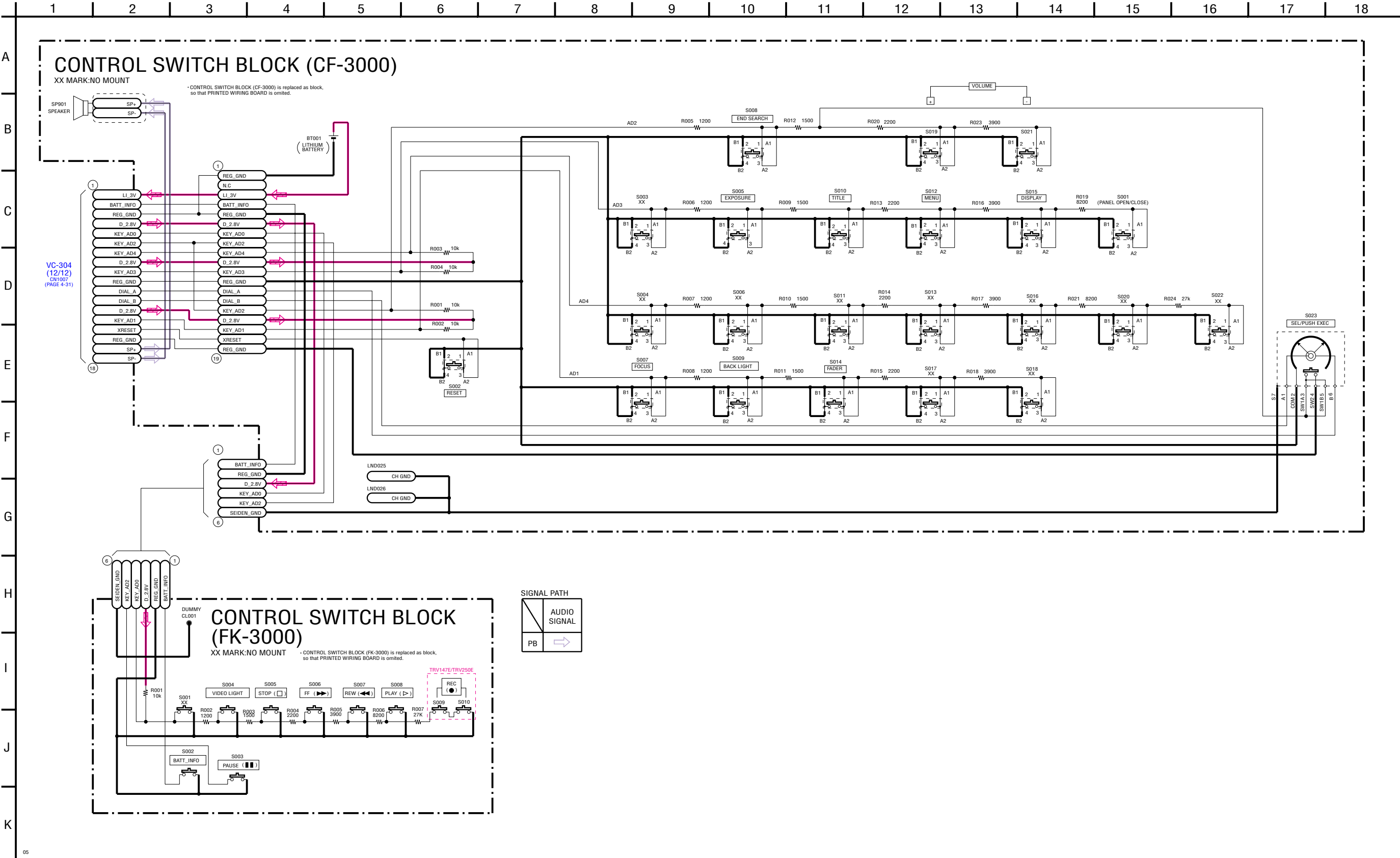


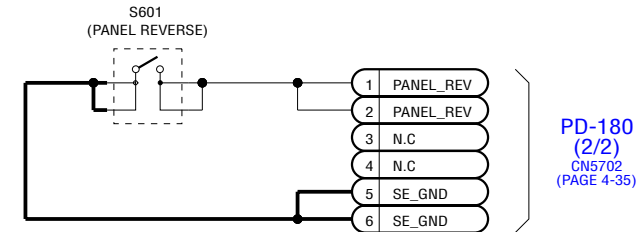
For Schematic Diagram
• Refer to page 4-64 for printed wiring board.





4-2. SCHEMATIC DIAGRAMS







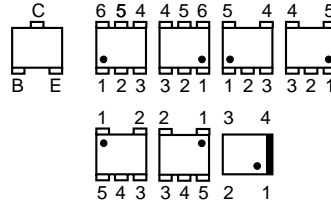
4-3. PRINTED WIRING BOARDS

4-3. PRINTED WIRING BOARDS

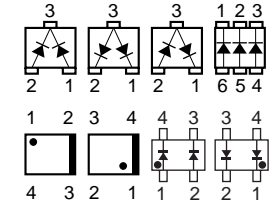
THIS NOTE IS COMMON FOR PRINTED WIRING BOARDS

- : Uses unleaded solder.
- : Circuit board
- : Flexible board
- : Pattern from the side which enables seeing.
- : pattern of the rear side
(The other layers' patterns are not indicated)
- Through hole is omitted.
- Circled numbers refer to waveforms.
- There are a few cases that the part printed on diagram isn't mounted in this model.
- : panel designation

- Chip parts.
Transistor



- Diode



Board Name	Parts Location	Waveforms	Pattern	
			Total Number of Layers	Layers Not Indicated
CD-418	—	4-65	2 layers	—
VC-304	4-72	4-66	4 layers	2, 3 layers
PD-180	4-73	4-70	2 layers	—
LB-090	—	—	2 layers	—
SI-035	4-73	—	2 layers	—



4-3. PRINTED WIRING BOARDS

Link

• CD-418 BOARD	• PD-180 BOARD (SIDE B)
• VC-304 BOARD (SIDE A)	• LB-090 BOARD
• VC-304 BOARD (SIDE B)	• SI-035 BOARD
• PD-180 BOARD (SIDE A)	• LS-057 BOARD, FP-228, FP-299, FP-300, FP-301, FP-302, FP-569, FP-577 FLEXIBLE BOARD

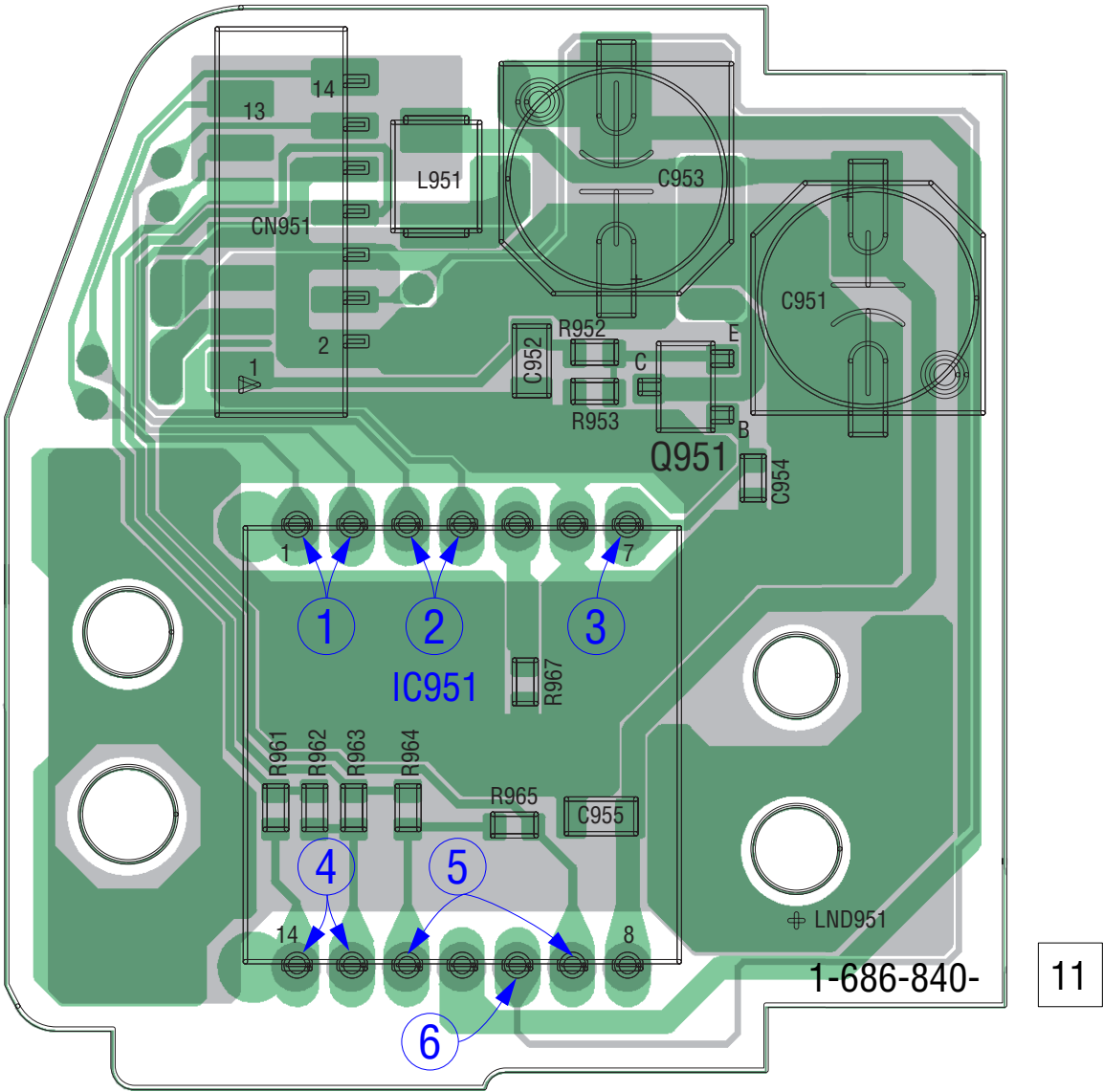
• COMMON NOTE FOR PRINTED WIRING BOARDS		• WAVEFORMS
• MOUNTED PARTS LOCATION	• CIRCUIT BOARDS LOCATION	• FLEXIBLE BOARDS LOCATION



CD-418 (CCD IMAGER)

Note for Printed Wiring Board (See page 4-47).

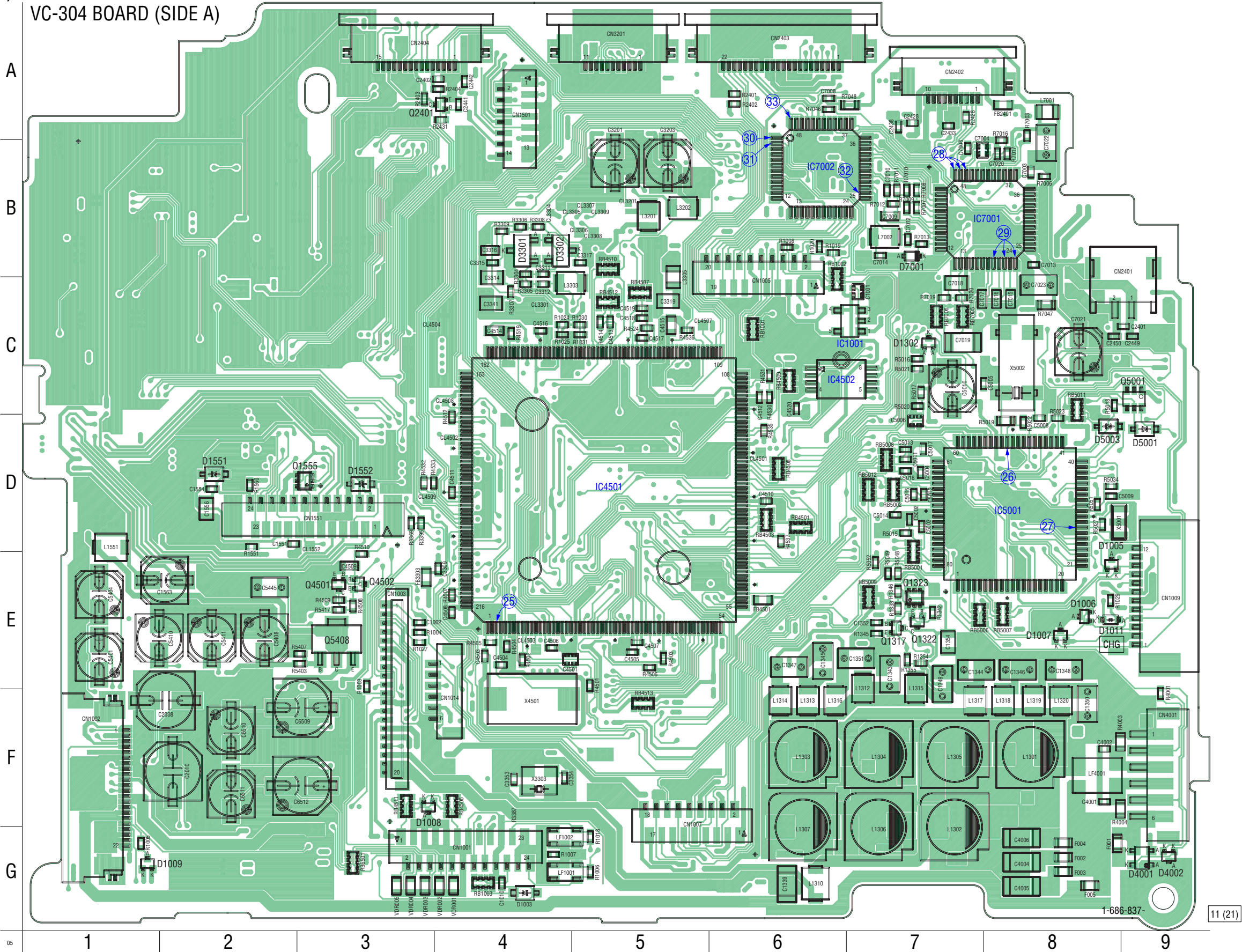
CD-418 BOARD





VC-304 (A/D CONVERTER, TIMING GENERATOR, DV SIGNAL PROCESS, DV INTERFACE, VIDEO OUT, LENS DRIVE, REC/PB AMP, SERVO, CAMERA/MECHA CONTROL, HI CONTROL, EVF DRIVE, AUDIO PROCESS, DC CONTROL)

Note for Printed Wiring Board (See page 4-47).



VC-304 BOARD (SIDE B)

1-686-837-

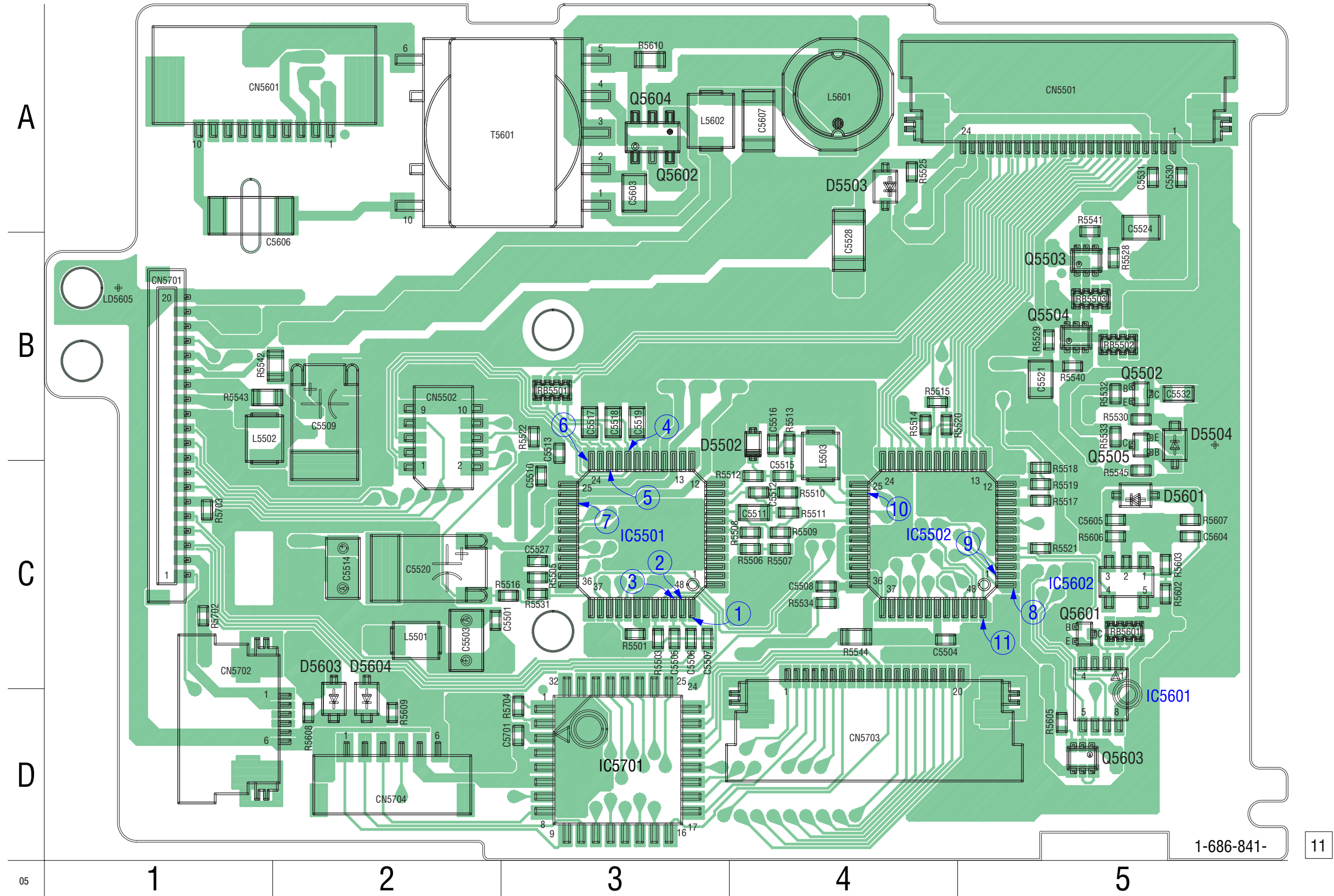
11 (21)



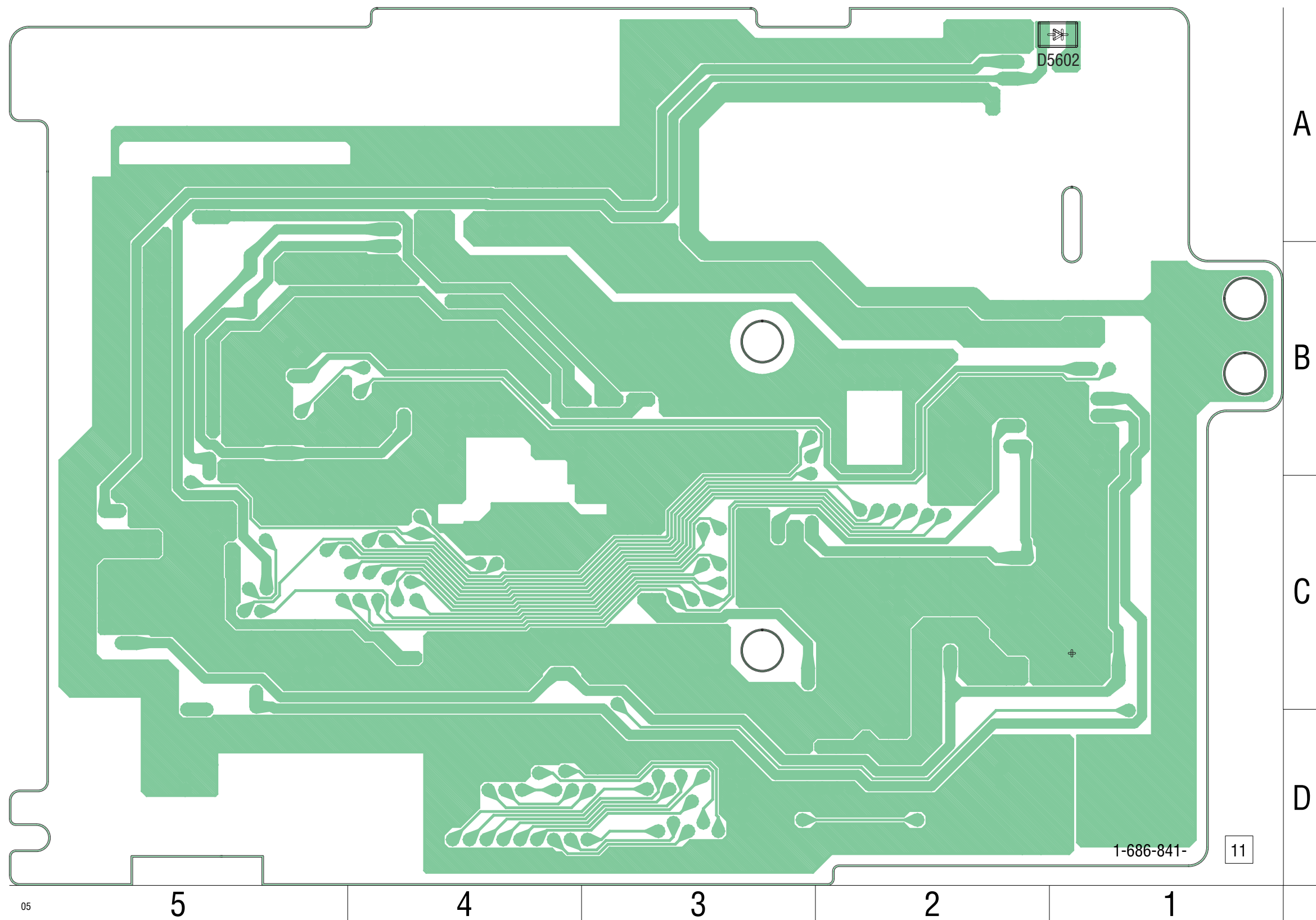
PD-180 (RGB DRIVE, TIMING GENERATOR, BACKLIGHT DRIVE)

Note for Printed Wiring Board (See page 4-47).

PD-180 BOARD (SIDE A)



PD-180 BOARD (SIDE B)

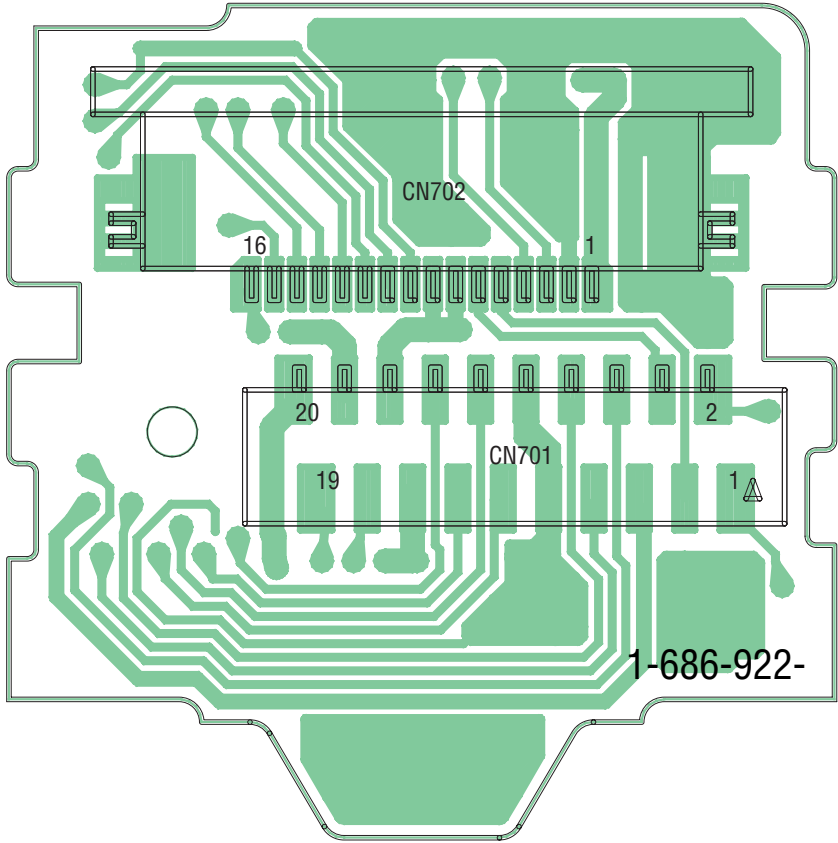




LB-090 (EVF, EVF BACKLIGHT)

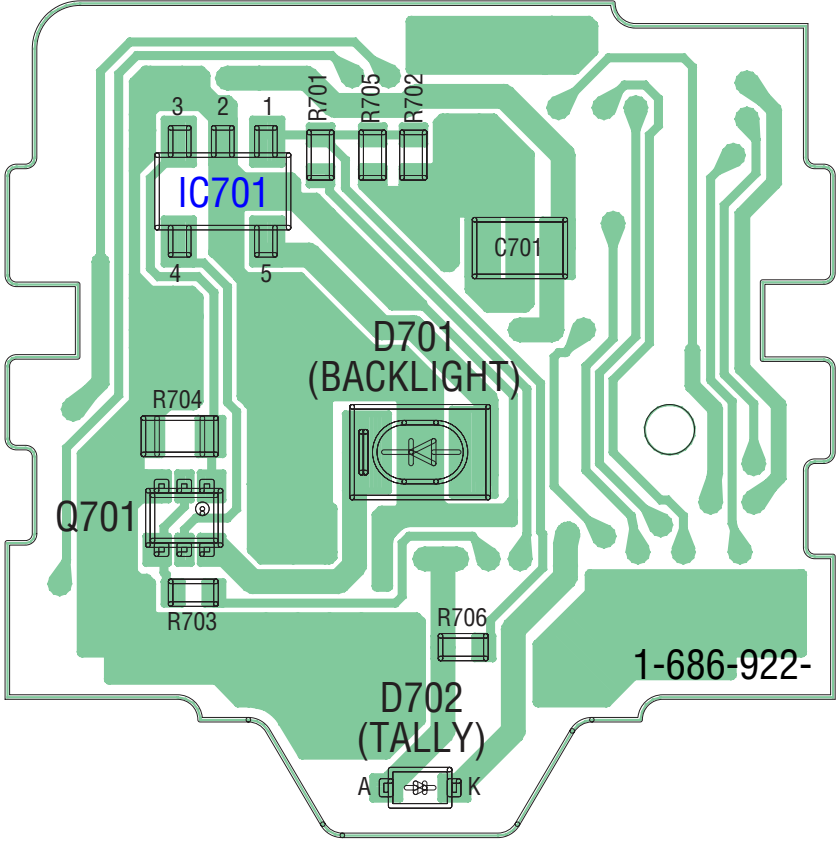
Note for Printed Wiring Board (See page 4-47).

LB-090 BOARD (SIDE A)



11

LB-090 BOARD (SIDE B)



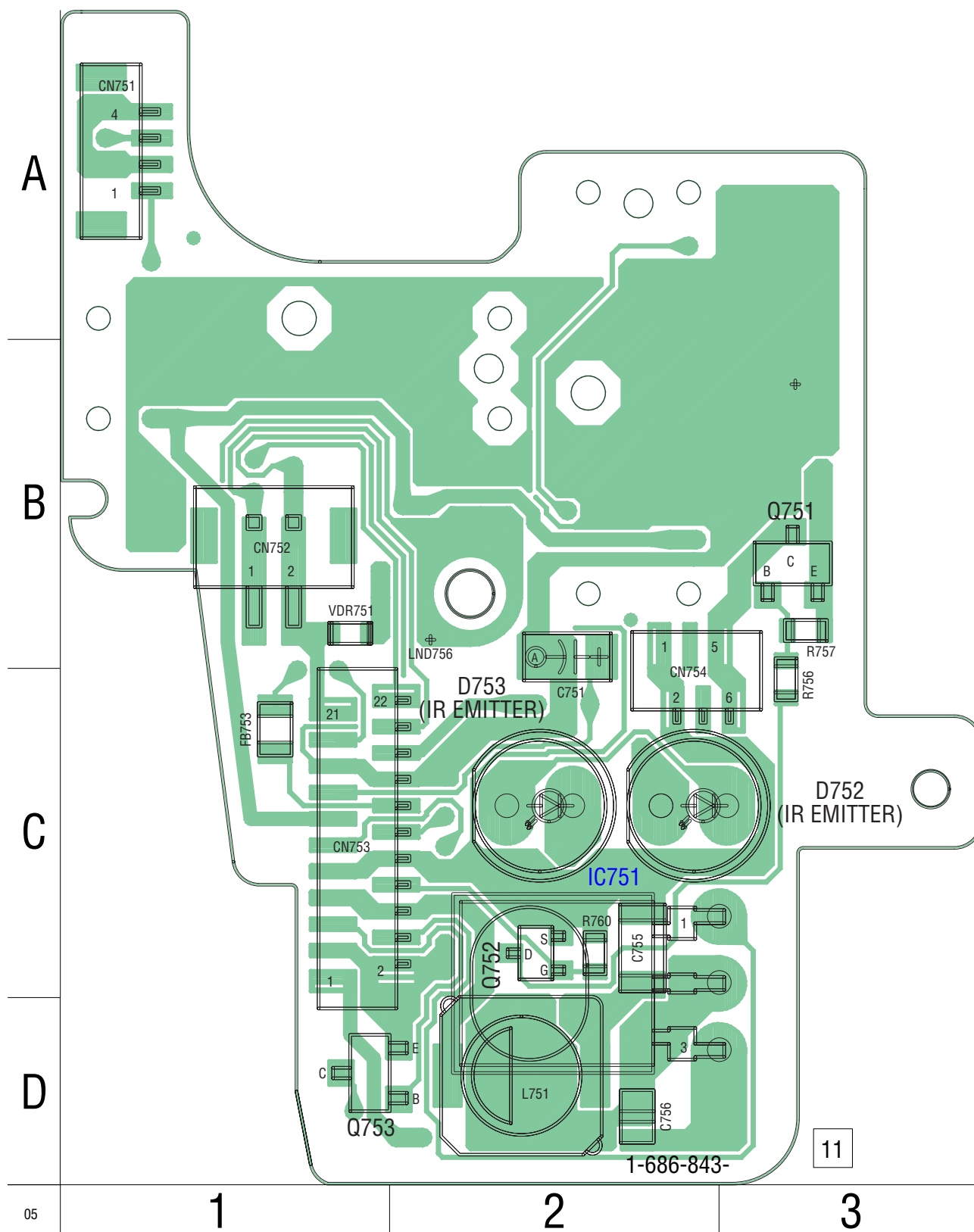
11



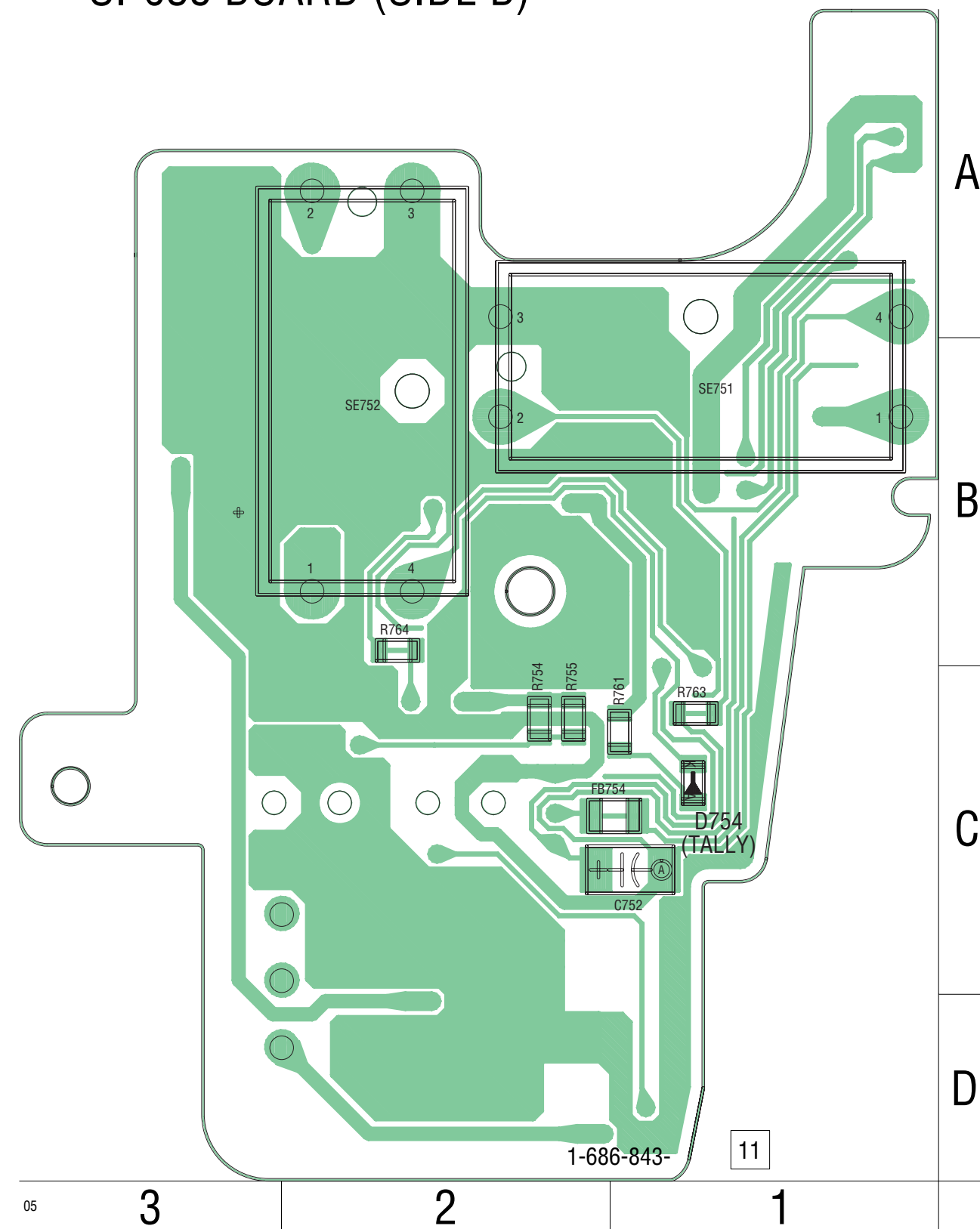
SI-035 (STEADYSHOT, MIC)

Note for Printed Wiring Board (See page 4-47).

SI-035 BOARD (SIDE A)



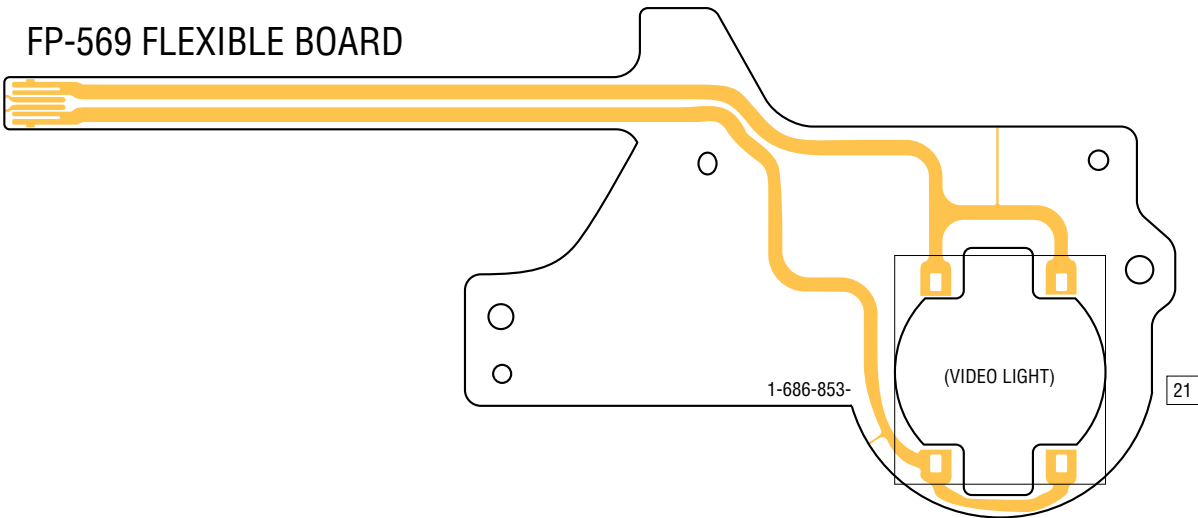
SI-035 BOARD (SIDE B)



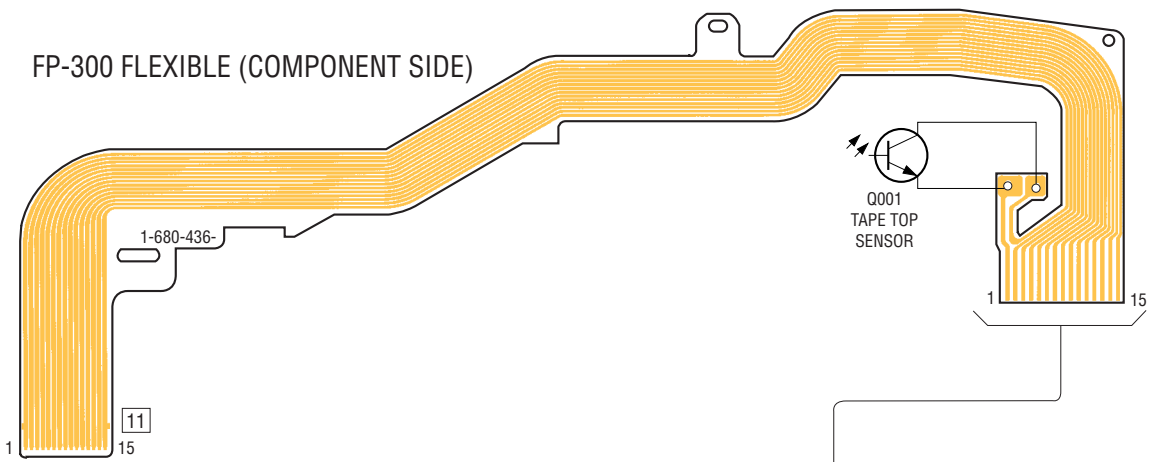


LS-057 (S/T REEL SENSOR), FP-228, FP-299, FP-300, FP-301, FP-302, FP-569, FP-577 FLEXIBLE

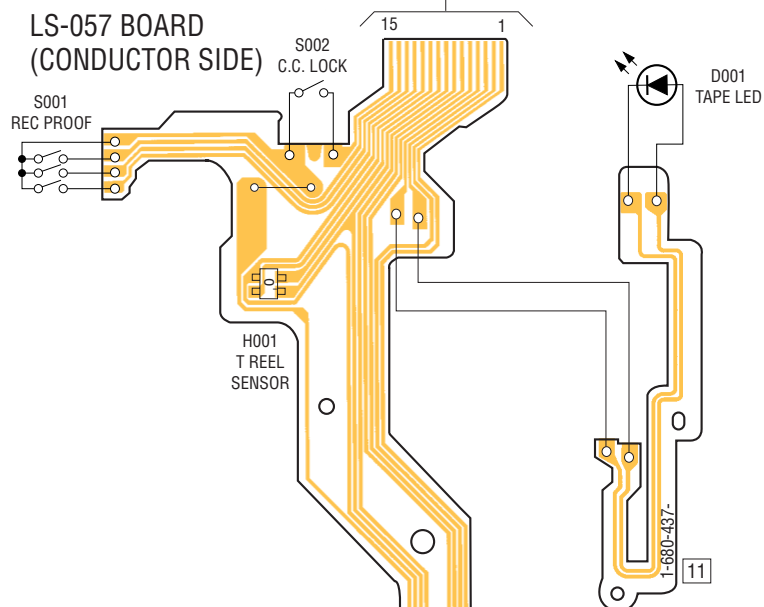
FP-569 FLEXIBLE BOARD



FP-300 FLEXIBLE (COMPONENT SIDE)

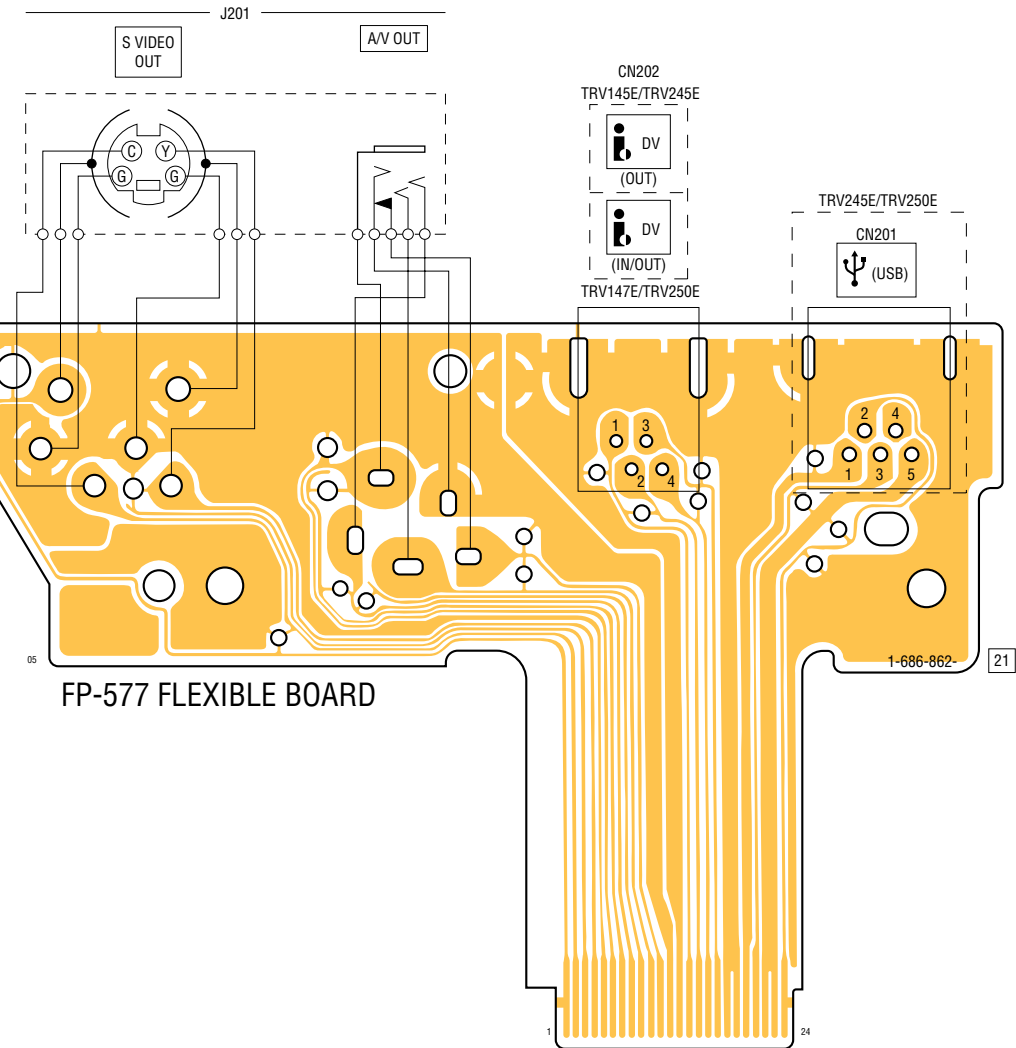
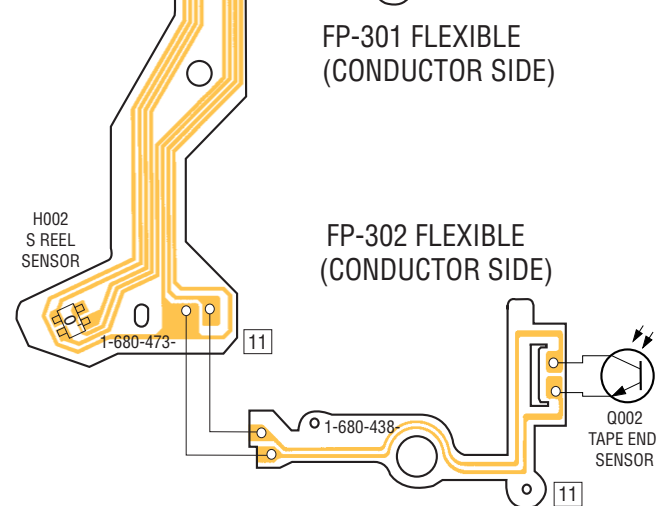


LS-057 BOARD (CONDUCTOR SIDE)

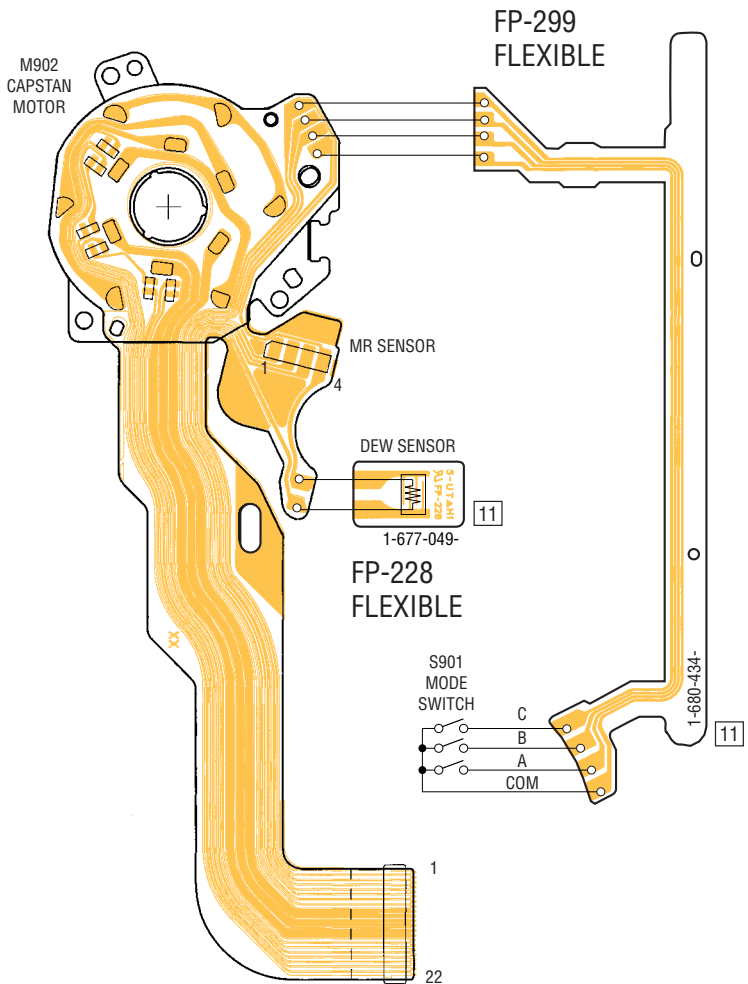


FP-301 FLEXIBLE (CONDUCTOR SIDE)

FP-302 FLEXIBLE (CONDUCTOR SIDE)



FP-299 FLEXIBLE



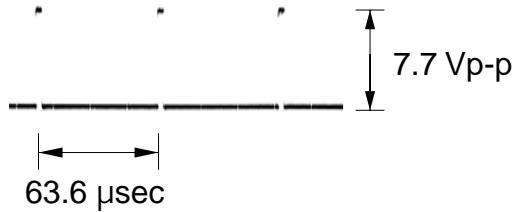


CD-418 BOARD

4-4. WAVEFORMS

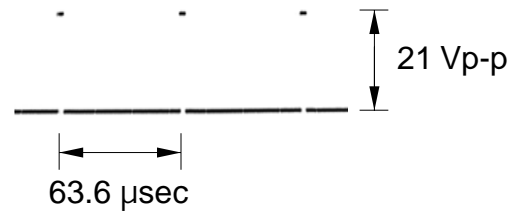
CD-418 BOARD

①



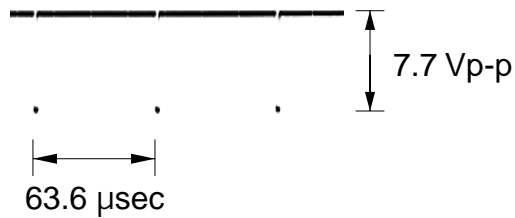
IC951 ①, ② REC

⑥



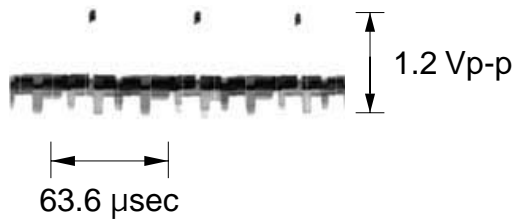
IC951 ⑩ REC

②



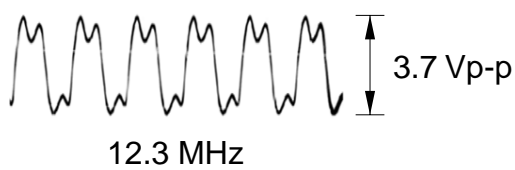
IC951 ③, ④ REC

③



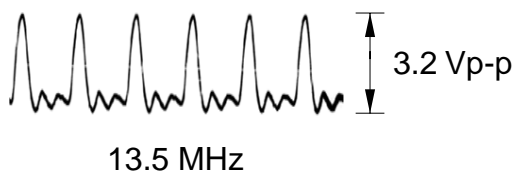
IC951 ⑦ REC

④



IC951 ⑬, ⑭ REC

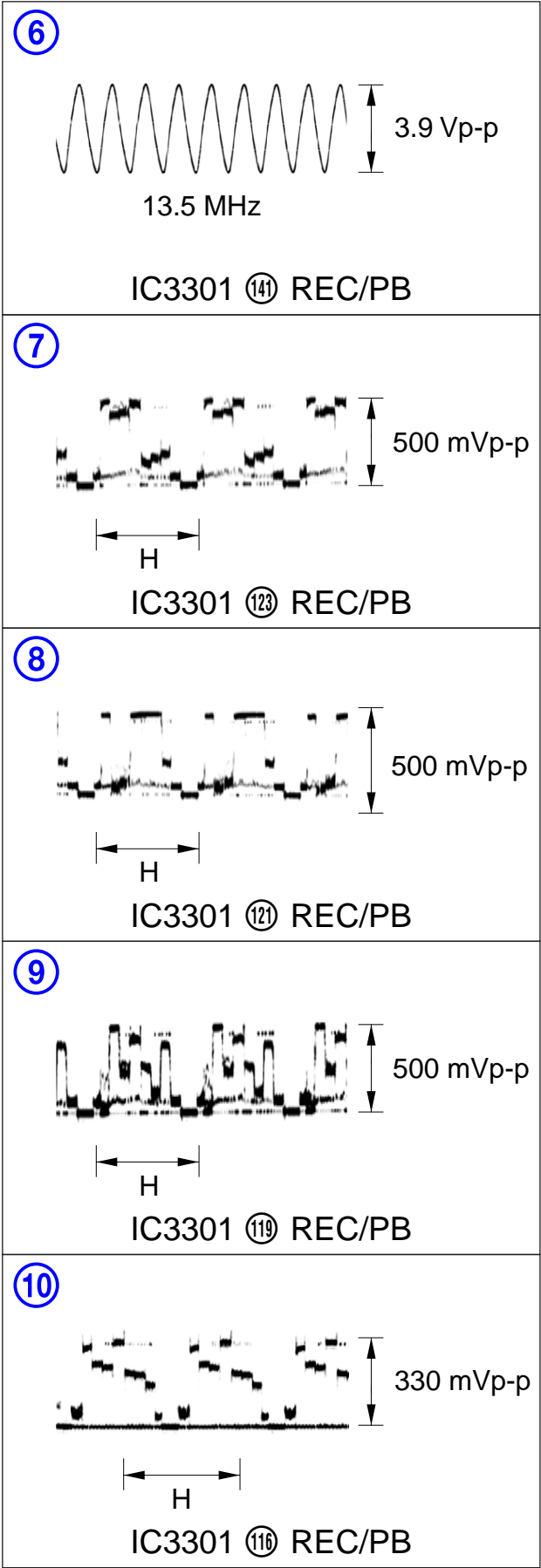
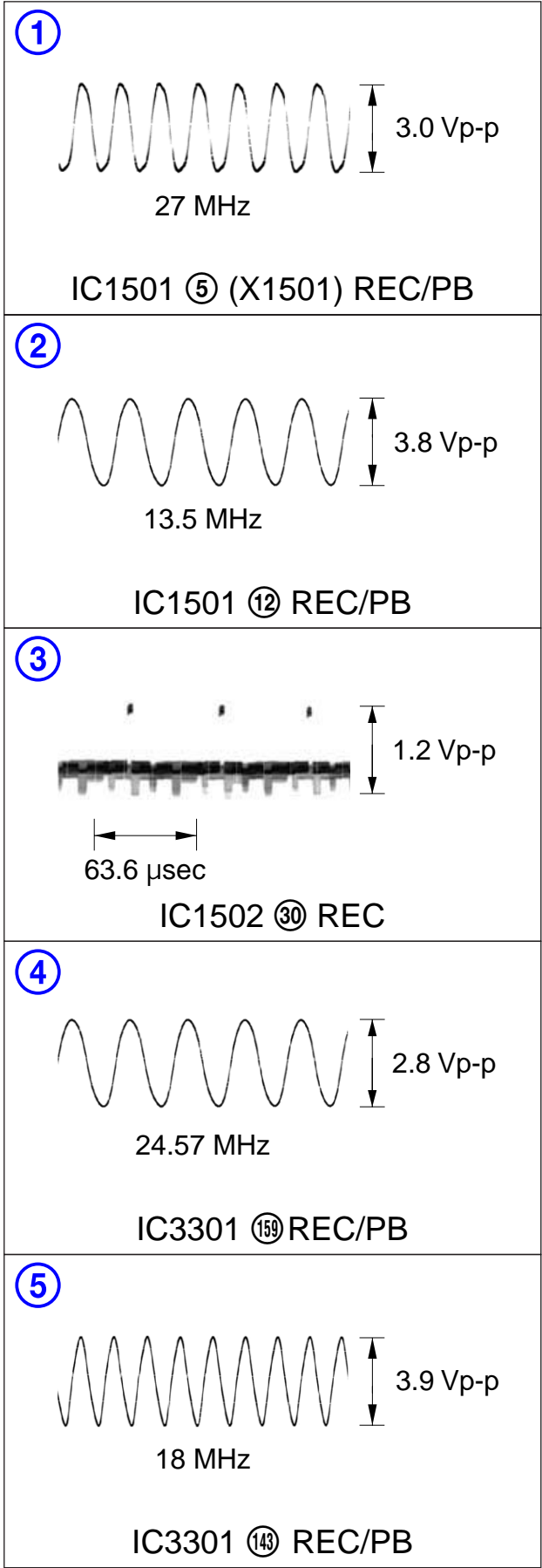
⑤



IC951 ⑨, ⑫ REC



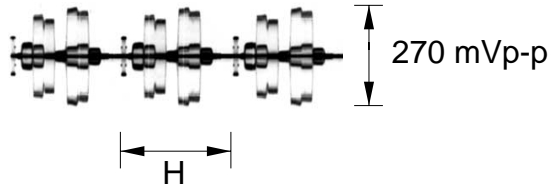
VC-304 BOARD (1/4)





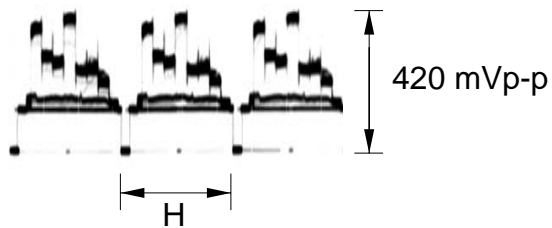
VC-304 BOARD (2/4)

⑪



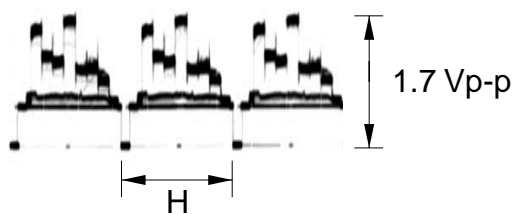
IC3301 ⑪ REC/PB

⑫



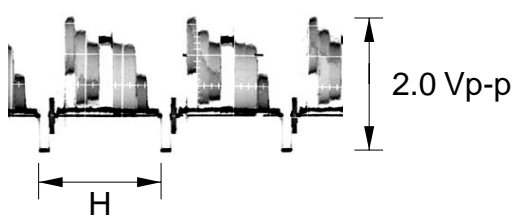
IC3301 ⑩ REC/PB

⑬



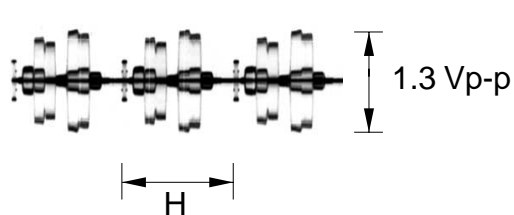
IC6501 ⑪ REC/PB

⑭



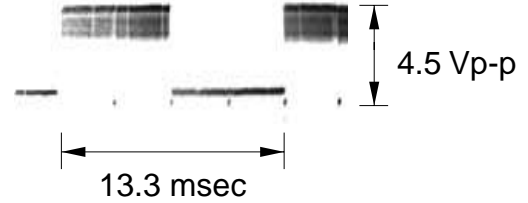
IC6501 ⑥ REC/PB

⑮



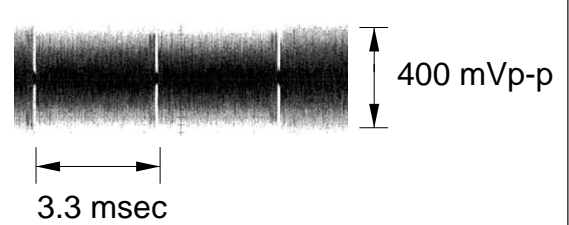
IC6501 ⑤ REC/PB

⑯



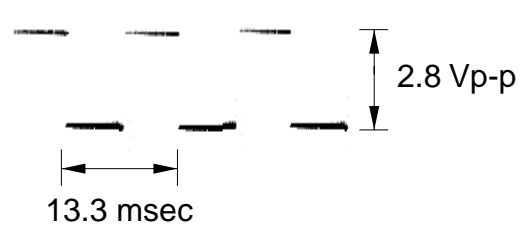
IC3201 ③, ④, ⑨, ⑩ REC

⑰



IC3201 ③⑤ PB

⑱



IC3201 ③⑧ REC/PB

⑲



IC2401 ④ REC/PB

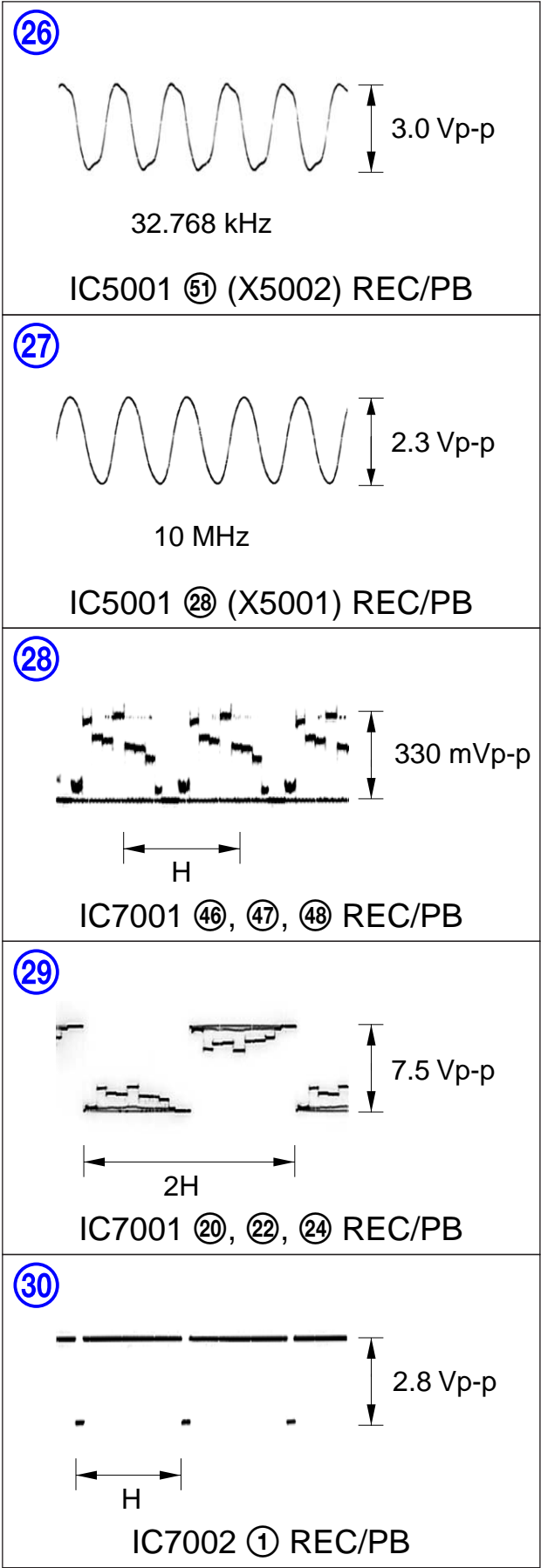
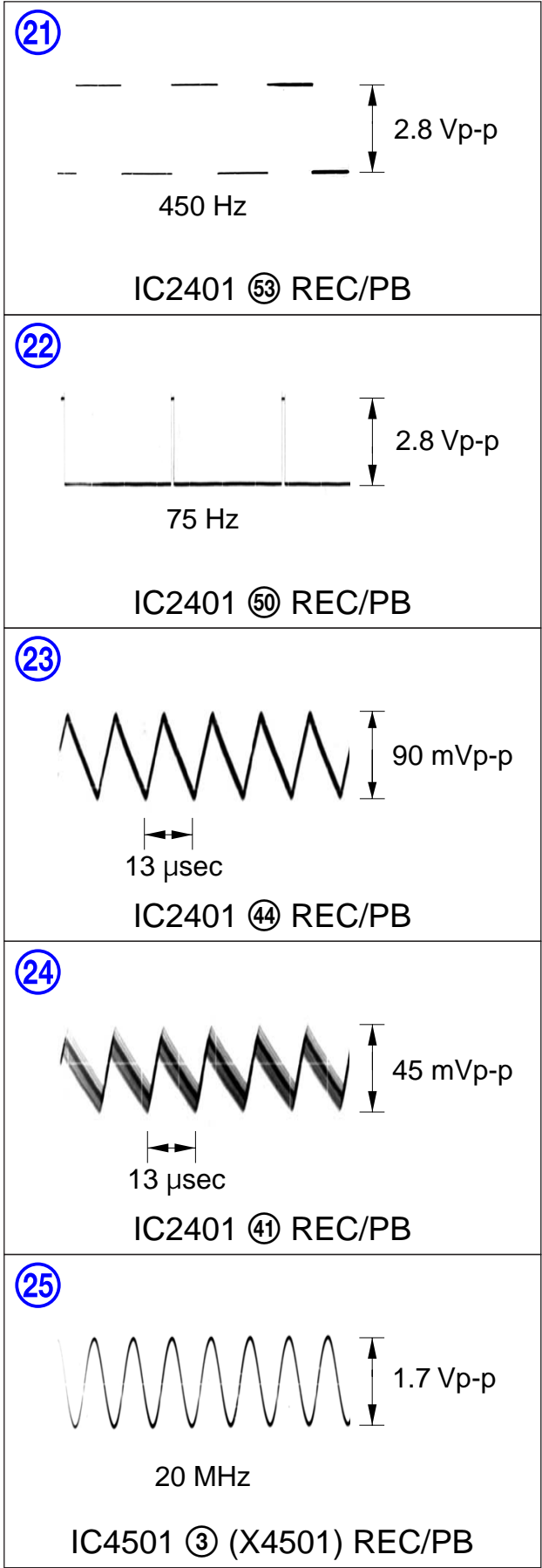
⑳



IC2401 ⑥③, ⑥⑤, ⑥⑧ REC/PB



VC-304 BOARD (3/4)



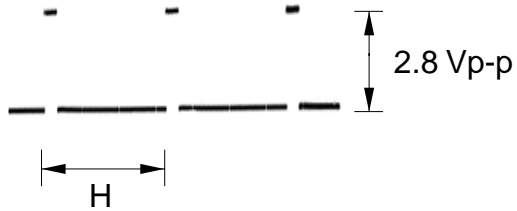


VC-304 BOARD SIDE A

VC-304 BOARD SIDE B

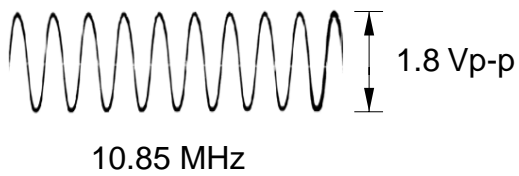
VC-304 BOARD (4/4)

③①



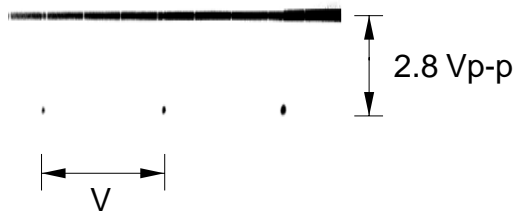
IC7002 ② REC/PB

③②



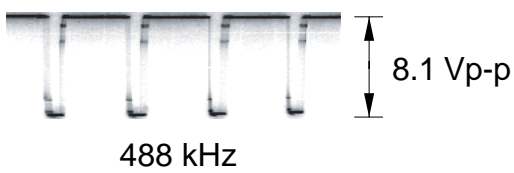
IC7002 ②⑥ REC/PB

③③



IC7002 ④⑧ REC/PB

③④



IC1301 ⑥② REC/PB

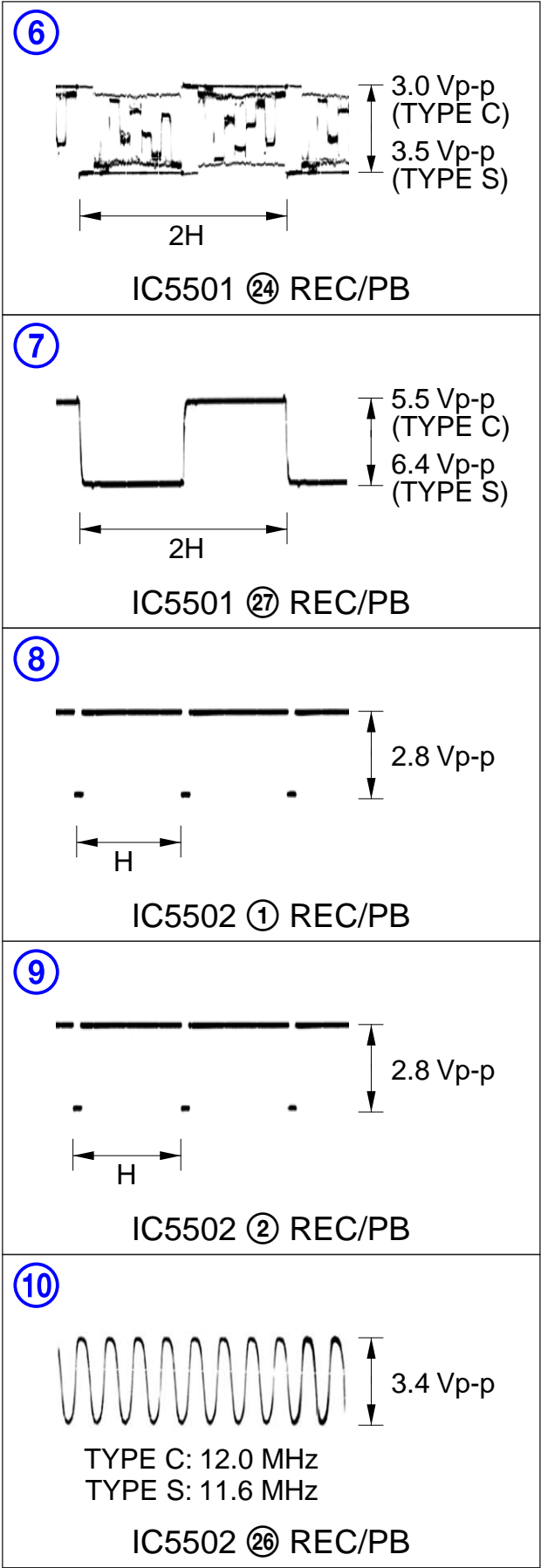
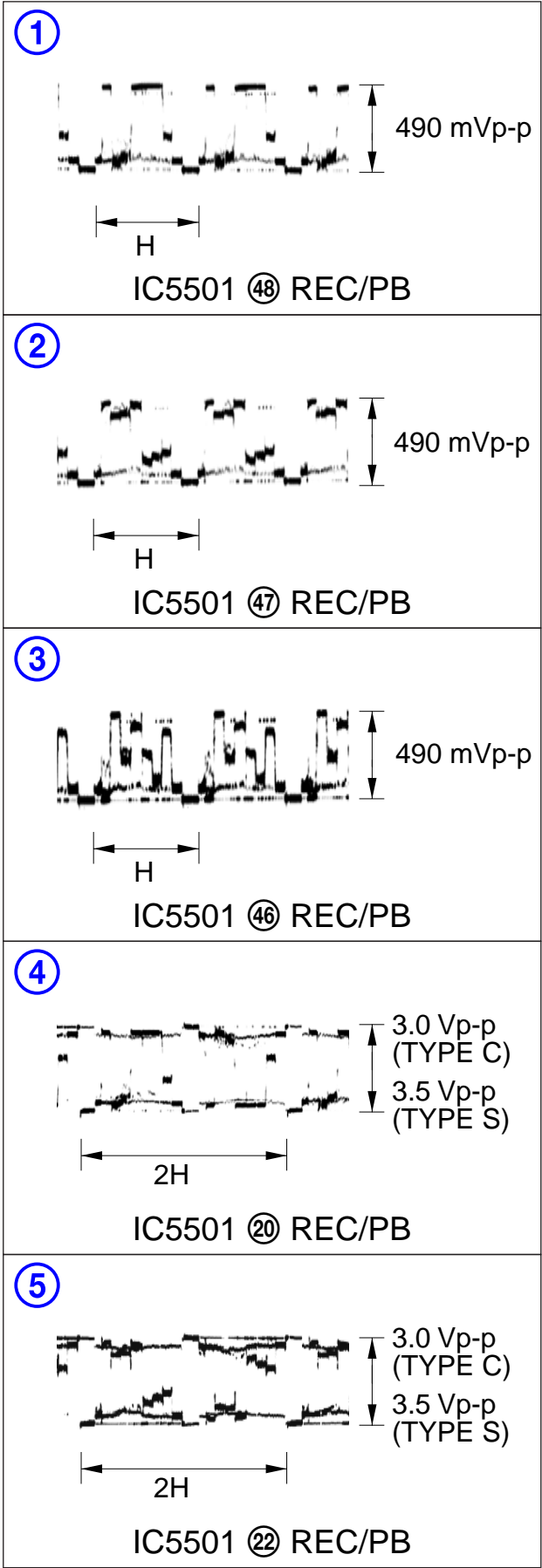
③⑤



IC1301 ⑥① REC/PB



PD-180 BOARD (1/2)

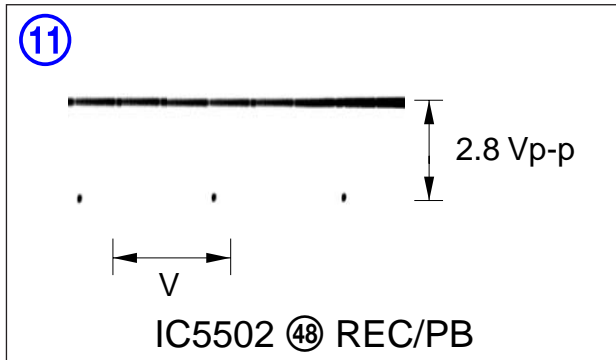




PD-180 BOARD SIDE A

PD-180 BOARD SIDE B

PD-180 BOARD (2/2)





4-3. PRINTED WIRING BOARDS

4-5. MOUNTED PARTS LOCATION

no mark : side A

* mark : side B

VC-304 BOARD

C1001 C-7	* C1559 C-2	* C3327 D-6	C7006 B-7	* IC3301 D-4	* Q4004 F-9
C1002 E-3	* C1560 C-1	* C3328 D-6	C7008 A-6	* IC3302 F-5	Q4501 E-3
* C1301 D-7	* C1561 D-1	* C3331 B-5	C7009 B-7	IC4501 D-5	Q4502 E-3
* C1302 E-7	* C1562 C-1	* C3332 F-5	C7010 B-7	IC4502 C-6	Q5001 C-9
* C1303 D-7	C1563 E-2	* C3333 F-4	C7012 B-7	IC5001 D-8	* Q5401 F-2
* C1304 E-7	* C1564 C-1	* C3335 E-5	C7013 B-8	* IC5401 E-2	* Q5403 F-2
* C1305 D-7	* C1565 C-2	* C3336 F-4	C7014 B-7	* IC5402 D-2	Q5408 E-3
* C1307 D-7	* C1566 C-2	* C3338 F-4	C7015 C-8	* IC6501 F-3	
* C1308 E-8	* C1568 C-2	* C3339 F-4	C7016 C-8	IC7001 B-8	R1003 E-3
* C1310 E-8	* C1571 C-1	* C3341 C-4	C7017 C-7	IC7002 B-6	R1004 E-3
* C1311 C-8	* C1572 C-1	* C3342 E-6	C7018 C-7		R1005 G-1
* C1312 C-8	* C1573 C-1	* C3344 B-5	C7019 C-7	L1301 F-8	R1006 G-5
* C1314 E-8	* C1601 B-1	* C3345 C-5	C7020 B-8	L1302 G-7	R1007 G-4
* C1315 C-8	* C2002 G-1	* C3357 F-5	C7021 C-8	L1303 F-6	R1008 B-6
* C1316 E-8	* C2005 F-1	* C4003 G-8	C7022 B-8	L1304 F-7	R1018 G-5
* C1317 E-8	* C2007 G-2	C4004 G-8		L1305 F-7	R1024 C-4
* C1318 C-8	C2008 F-2	C4005 G-8	CN1001 F-4	L1306 G-7	R1025 C-4
* C1320 F-8	C2010 F-2	C4501 E-4	CN1002 F-1	L1307 G-6	R1027 E-3
* C1321 G-8	* C2016 F-2	C4503 E-4	CN1003 F-3	* L1308 F-7	R1029 E-8
* C1322 F-6	C2401 C-9	C4504 E-4	CN1005 C-6	* L1309 F-7	R1031 C-5
* C1323 F-8	C2402 A-3	C4506 E-4	CN1007 F-5	L1310 G-6	* R1301 D-7
* C1324 E-8	* C2403 A-7	C4507 E-5	CN1009 E-9	* L1311 E-7	* R1302 E-7
* C1326 G-7	* C2406 A-7	C4508 E-4	* CN1011 C-9	L1312 E-7	* R1303 D-7
* C1327 F-8	* C2407 A-7	C4509 E-3	CN1501 A-4	L1313 F-6	* R1306 E-7
* C1328 E-9	* C2409 A-7	C4510 D-6	CN1551 D-3	L1314 F-6	* R1307 E-7
* C1329 F-7	* C2411 C-8	C4511 D-4	CN2401 B-9	L1315 E-7	* R1308 E-7
* C1330 F-7	* C2412 B-8	C4512 C-6	CN2402 A-7	L1316 F-6	* R1309 E-7
* C1331 G-7	* C2413 B-6	C4514 C-4	CN2403 A-6	L1317 F-7	* R1311 E-8
* C1332 F-6	* C2414 B-6	C4515 C-5	CN2404 A-3	L1318 F-8	* R1313 D-7
* C1333 F-6	* C2415 A-8	C4517 C-5	CN3201 A-5	L1319 F-8	* R1314 E-8
* C1334 E-7	* C2416 B-6	C4518 C-5	CN4001 F-9	L1320 F-8	* R1315 E-8
* C1335 E-8	* C2417 B-6	C4519 C-5		* L1501 B-2	* R1316 E-8
* C1336 G-7	* C2418 B-8	C4520 C-6	D1003 G-4	L1551 D-1	* R1317 E-8
* C1337 G-6	* C2420 B-8	C5002 D-7	D1005 E-8	* L1553 C-1	* R1318 E-8
* C1338 F-7	* C2422 B-6	C5003 D-7	D1006 E-8	* L2001 F-2	* R1319 E-8
C1339 G-6	* C2423 B-6	C5004 D-7	D1007 E-8	L3201 B-5	* R1321 E-8
* C1340 F-7	* C2424 B-8	C5005 C-7	D1008 F-3	L3202 B-5	* R1325 D-8
* C1341 E-7	* C2427 B-7	C5006 D-7	D1009 G-1	* L3203 A-6	* R1336 E-8
* C1342 E-7	C2428 A-7	C5008 D-8	D1011 E-8	* L3204 A-6	* R1337 E-8
C1343 E-7	* C2429 B-7	C5009 D-8	* D1301 D-8	L3305 B-5	R1338 E-7
C1344 E-7	* C2430 C-7	C5010 C-7	D1302 C-7	* L3307 B-5	* R1339 F-8
C1345 E-6	* C2431 B-7	C5401 E-1	* D1303 E-9	* L3310 E-5	* R1340 E-7
C1346 E-8	* C2433 A-7	C5404 E-1	* D1305 E-8	* L3313 B-5	R1342 E-7
C1347 E-6	* C2434 B-7	* C5405 F-1	* D1306 F-8	* L3320 B-6	* R1343 E-8
C1348 E-8	* C2435 B-7	C5408 E-2	* D1501 B-3	* L4001 G-8	* R1344 F-8
C1349 E-7	* C2436 C-7	* C5409 F-1	D1551 D-2	* L5401 D-1	R1345 E-7
C1350 F-8	* C2437 C-7	C5410 E-1	D4001 G-9	* L6501 F-3	R1346 E-7
C1351 E-7	C2438 A-7	C5411 E-2	D4002 G-9	L7001 A-8	* R1347 E-8
C1352 E-7	* C2439 B-7	* C5413 E-3	D5001 D-9	L7002 B-7	* R1348 F-8
C1354 E-7	* C2440 C-7	* C5414 E-2	D5003 D-8		* R1349 F-8
* C1355 F-8	C2449 C-9	* C5416 E-2	D7001 B-7	LF4001 F-8	* R1350 F-9
* C1356 E-7	C2450 C-8	* C5418 E-2			* R1351 E-7
* C1357 E-8	C3201 B-5	* C5419 D-1	F001 G-8	* Q1305 F-7	* R1352 E-7
* C1358 E-9	* C3202 B-5	* C5420 D-2	F002 G-8	* Q1306 F-7	* R1353 E-7
* C1371 E-7	C3203 B-5	* C5421 D-2	F003 G-8	* Q1307 F-6	R1354 E-7
* C1373 E-7	* C3204 B-5	* C5422 D-2	F004 G-8	* Q1308 F-7	R1355 E-7
* C1390 D-9	* C3205 B-5	* C5423 D-2	F005 G-8	* Q1309 G-7	* R1356 E-7
* C1391 D-9	* C3208 B-5	* C5424 E-1		* Q1310 G-6	* R1357 E-8
* C1501 A-3	* C3210 B-5	* C5427 D-1	* FB001 E-8	* Q1311 F-8	* R1358 E-8
* C1502 A-3	* C3211 B-5	* C5430 D-1	* FB1501 A-3	* Q1315 E-8	* R1359 E-8
* C1503 A-3	* C3212 B-5	* C5431 D-2	* FB1504 C-2	* Q1316 F-8	* R1503 A-4
* C1504 A-4	* C3213 B-5	* C5433 D-1	* FB1601 B-1	Q1317 E-7	* R1509 B-4
* C1507 A-3	* C3214 B-5	* C5435 E-1	FB2401 A-8	* Q1318 F-8	* R1512 B-3
* C1508 C-2	* C3215 A-4	* C5436 E-1	* FB2402 B-7	* Q1319 E-7	* R1521 B-3
* C1509 A-2	* C3217 A-5	* C5437 E-1	* FB2403 B-7	* Q1320 F-8	* R1523 A-3
* C1510 B-3	* C3218 A-6	* C5438 E-1	* FB3301 D-6	* Q1321 E-7	* R1525 A-2
* C1511 B-4	* C3219 A-6	* C5439 E-1	* FB3302 F-5	Q1322 E-7	* R1526 B-2
* C1512 B-3	* C3220 A-5	* C5440 E-1	FB3303 E-3	Q1323 E-7	* R1528 B-2
* C1515 B-3	* C3221 A-6	* C5441 E-1	* FB3304 G-3	* Q1324 E-8	* R1530 A-4
* C1516 B-3	* C3223 A-6	* C5442 E-1	FB4501 E-6	* Q1325 E-8	R1551 D-2
* C1517 B-3	* C3224 B-5	* C5443 E-1		* Q1551 C-1	* R1556 C-2
* C1518 B-3	* C3225 B-5	C5445 E-2	IC1001 C-7	* Q1554 C-1	R1560 D-2
* C1521 B-3	* C3304 D-3	* C5446 E-2	* IC1301 D-8	Q1555 D-3	* R1561 C-1
* C1522 B-3	* C3305 E-3	* C6501 F-3	* IC1302 E-7	Q2401 A-3	* R1562 C-2
* C1523 B-3	* C3306 D-3	* C6502 F-3	* IC1303 D-9	* Q3202 A-6	* R1563 C-2
* C1524 B-2	* C3309 E-4	* C6504 F-3	* IC1501 A-3	* Q3203 A-5	* R1564 C-2
* C1525 B-2	* C3310 C-4	* C6506 F-3	* IC1502 A-3	* Q3204 A-6	* R1565 C-1
* C1526 B-2	* C3313 E-4	* C6507 F-3	* IC1503 B-2	* Q3205 A-5	* R1566 C-2
* C1527 A-4	C3314 C-4	C6509 F-3	* IC1552 C-1	* Q3303 C-6	* R1567 C-1
* C1530 B-3	C3319 C-5	C6510 F-2	* IC1553 D-1	* Q3304 C-6	* R1568 C-1
* C1552 C-1	* C3320 C-5	C6511 F-2	* IC1601 B-1	* Q3307 C-6	* R1570 C-1
C1554 D-2	* C3321 C-5	C6512 F-3	* IC2001 F-2	* Q4001 G-8	* R1573 C-2
C1556 D-2	* C3322 C-5	C7003 B-8	* IC2401 B-7	* Q4002 G-8	* R1575 C-2
* C1558 C-2	* C3326 E-6	C7004 B-7	* IC3201 A-5	* Q4003 F-9	* R1576 C-2



4-3. PRINTED WIRING BOARDS

no mark : side A

* mark : side B

PD-180 BOARD

SI-035 BOARD

* R1577 C-2	R4532 D-3	VDR002 G-4	C5503 C-2	R5540 B-5	C751 B-2
* R2005 F-2	R4533 D-3	VDR003 G-3	C5504 C-4	R5541 A-5	* C752 C-1
* R2006 F-2	R4536 C-5	VDR004 G-3	C5505 C-3	R5542 B-2	C755 C-2
* R2007 G-2	R4537 D-6	VDR005 G-3	C5506 C-3	R5543 B-1	
* R2008 G-2	R5015 D-7		C5507 C-3	R5544 C-4	CN751 A-1
R2401 A-6	R5016 C-7	* X1501 A-2	C5509 B-2	R5545 C-5	CN753 C-1
R2402 A-6	R5017 C-7	X4501 F-4	C5510 C-3	R5602 C-5	CN754 C-2
R2403 A-3	R5018 C-8	X5001 D-8	C5511 C-4	R5603 C-5	
R2404 A-4	R5019 D-8	X5002 C-8	C5512 C-4	R5606 C-5	D752 C-2
* R2418 C-8	R5020 C-7		C5513 B-3	R5607 C-5	D753 C-2
* R2419 A-6	R5021 C-7		C5514 C-2	R5610 A-3	* D754 C-1
* R2421 B-6	R5022 D-8		C5515 C-4		
* R2422 B-6	R5023 D-8		C5516 B-4	RB5501 B-3	FB753 C-1
* R2423 B-8	R5027 D-8		C5517 B-3	RB5502 B-5	
* R2424 C-7	R5034 D-8		C5518 B-3	RB5503 B-5	IC751 C-2
R2428 A-7	R5051 D-8		C5519 B-3	RB5601 C-5	
R2431 A-4	R5052 E-7		C5520 C-2		L751 D-2
* R2434 A-3	R5403 E-3		C5521 B-5	T5601 A-2	
* R3210 B-5	R5407 E-3		C5524 A-5		Q751 B-3
* R3212 A-5	* R5416 E-3		C5527 C-3		Q752 C-2
* R3214 A-5	R5417 E-3		C5528 B-4		Q753 D-1
* R3216 A-5	* R5418 F-1		C5530 A-5		
* R3218 A-5	* R5421 D-2		C5531 A-5		* R754 C-2
* R3219 A-5	* R5422 D-2		C5603 A-3		* R755 C-2
* R3220 A-6	* R5429 E-1		C5604 C-5		R756 C-3
* R3221 A-5	* R5430 E-1		C5605 C-5		R757 B-3
* R3222 A-5	* R5431 E-1		C5606 A-1		R760 C-2
* R3223 A-5	* R5432 E-1		C5607 A-4		* R761 C-1
* R3224 A-5	* R5435 D-2				
* R3225 A-5	* R5436 D-2		CN5501 A-5		* SE751 B-1
* R3226 A-5	* R6507 F-3		CN5502 B-2		* SE752 B-2
* R3227 A-6	* R6508 F-3		CN5601 A-1		
* R3228 A-6	* R6509 F-3		CN5701 B-1		VDR751 B-1
* R3229 A-5	R7003 A-8		CN5702 D-1		
* R3230 A-6	R7006 B-8				
* R3231 A-5	R7007 B-7		D5502 B-4		
R3307 C-4	R7008 B-7		D5503 A-4		
* R3313 C-6	R7009 B-7		D5601 C-5		
* R3314 C-6	R7010 B-7				
* R3315 C-5	R7011 B-7		IC5501 C-3		
* R3316 C-5	R7012 B-7		IC5502 C-4		
* R3326 C-6	R7013 B-7		IC5601 D-5		
* R3330 C-6	R7016 B-8		IC5602 C-5		
* R3332 C-6	R7019 C-7				
* R3335 C-6	R7020 C-7		L5501 C-2		
* R3342 F-4	R7046 A-6		L5503 B-4		
* R3343 C-6			L5601 A-4		
* R3350 C-6	RB1003 G-4		L5602 A-3		
* R3353 F-4	* RB1004 C-8				
* R3356 F-4	* RB1551 C-2		Q5502 B-5		
* R3361 F-4	* RB1552 C-1		Q5503 B-5		
* R3362 B-5	* RB2401 A-8		Q5504 B-5		
* R3363 B-5	* RB2001 F-1		Q5505 B-5		
* R3364 C-6	* RB3201 A-6		Q5601 C-5		
* R3365 D-6	* RB3303 F-4		Q5602 A-3		
R3369 D-3	* RB3304 C-6				
* R3370 D-3	* RB3305 C-6		R5501 C-3		
* R3379 B-4	* RB3307 D-6		R5503 C-3		
* R3392 D-6	RB4501 D-6		R5505 C-3		
* R3393 C-4	RB4507 C-5		R5506 C-4		
R3395 D-3	RB4508 D-6		R5507 C-4		
* R3397 C-5	RB4509 C-6		R5508 C-4		
* R3398 D-6	RB4510 B-5		R5509 C-4		
R4001 F-9	RB4511 F-3		R5510 C-4		
* R4006 G-8	RB4512 C-5		R5511 C-4		
* R4007 G-8	RB4513 F-5		R5512 C-4		
* R4008 G-9	* RB4514 C-7		R5513 B-4		
* R4009 G-9	RB5001 E-7		R5514 B-4		
* R4010 F-9	RB5002 D-7		R5515 B-4		
R4501 E-5	RB5006 E-7		R5516 C-3		
R4502 E-4	RB5007 E-8		R5517 C-5		
R4503 E-5	RB5008 D-7		R5518 C-5		
R4504 E-4	RB5009 E-7		R5519 C-5		
R4506 E-5	RB5011 C-8		R5520 B-4		
R4507 E-4	RB5012 D-7		R5521 C-5		
R4508 E-4	* RB5401 F-2		R5522 B-3		
R4509 E-3	* RB5402 F-2		R5525 A-4		
R4510 E-3	RB6501 G-3		R5528 B-5		
R4512 D-4	RB7005 C-7		R5529 B-5		
R4514 C-5	RB7006 C-7		R5530 B-5		
R4519 C-4			R5531 C-3		
R4524 C-5	VDR001 G-4		R5532 B-5		
R4530 C-6			R5533 B-5		
R4531 C-6			R5534 C-4		



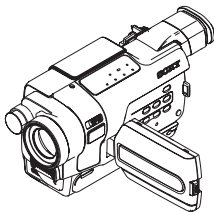
NOTE

5. REPAIR PARTS LIST

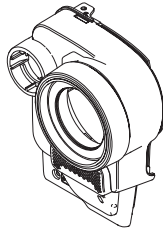
NOTE: Characters **A** to **L** of the electrical parts list indicate location of exploded views in which the desired part is shown.

Link

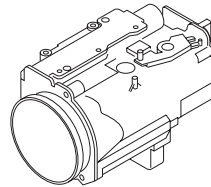
EXPLODED VIEWS

**A**

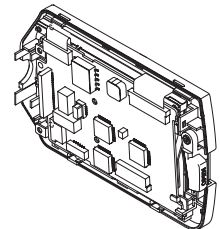
OVERALL ASSEMBLY

**B**

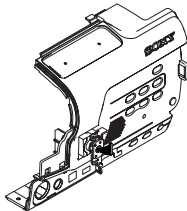
F PANEL BLOCK ASSEMBLY

**C**

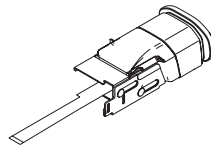
LENS BLOCK ASSEMBLY

**D**

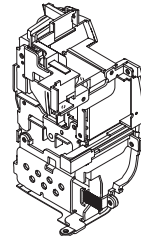
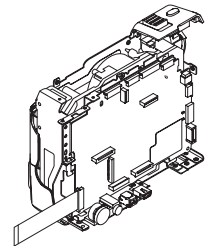
LCD BLOCK ASSEMBLY

**E**

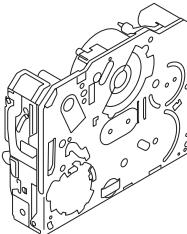
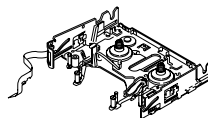
CABINET (R) BLOCK ASSEMBLY

**F**

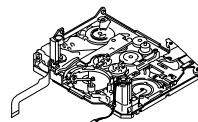
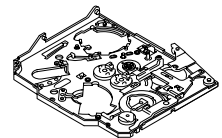
EVF BLOCK ASSEMBLY

**G**BATTERY PANEL
BLOCK ASSEMBLY**H**

MD FRAME BLOCK

**I**CASSETTE COMPARTMENT
ASSEMBLY, DRUM ASSEMBLY**J**

LS CHASSIS BLOCK ASSEMBLY

**K**MECHANICAL CHASSIS
BLOCK ASSEMBLY-1**L**MECHANICAL CHASSIS
BLOCK ASSEMBLY-2

Link

ELECTRICAL PARTS LIST

ACCESSORIES

CD-418 BOARD C	LB-090 BOARD F	SI-035 BOARD B
FP-300 FLEXIBLE BOARD J	LS-057 BOARD J	VC-304 BOARD H
FP-301 FLEXIBLE BOARD J	PD-180 BOARD (TYPE C) D	
FP-302 FLEXIBLE BOARD J	PD-180 BOARD (TYPE S) D	



5. REPAIR PARTS LIST

SECTION 5 REPAIR PARTS LIST

NOTE:

- -XX, -X mean standardized parts, so they may have some differences from the original one.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.
- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- CAPACITORS:
uF: μ F
- COILS
uH: μ H
- RESISTORS
All resistors are in ohms.
METAL: metal-film resistor
METAL OXIDE: Metal Oxide-film resistor
F: nonflammable
- SEMICONDUCTORS
In each case, u: μ , for example:
uA...: μ A..., uPA..., μ PA...,
uPB..., μ PB..., uPC..., μ PC...,
uPD..., μ PD...
- Abbreviation
AUS : Australian model
CH : Chinese model
EE : East European model
JE : Tourist model
NE : North European model

When indicating parts by reference number, please include the board name.

The components identified by mark \triangle or dotted line with mark \triangle are critical for safety. Replace only with part number specified.

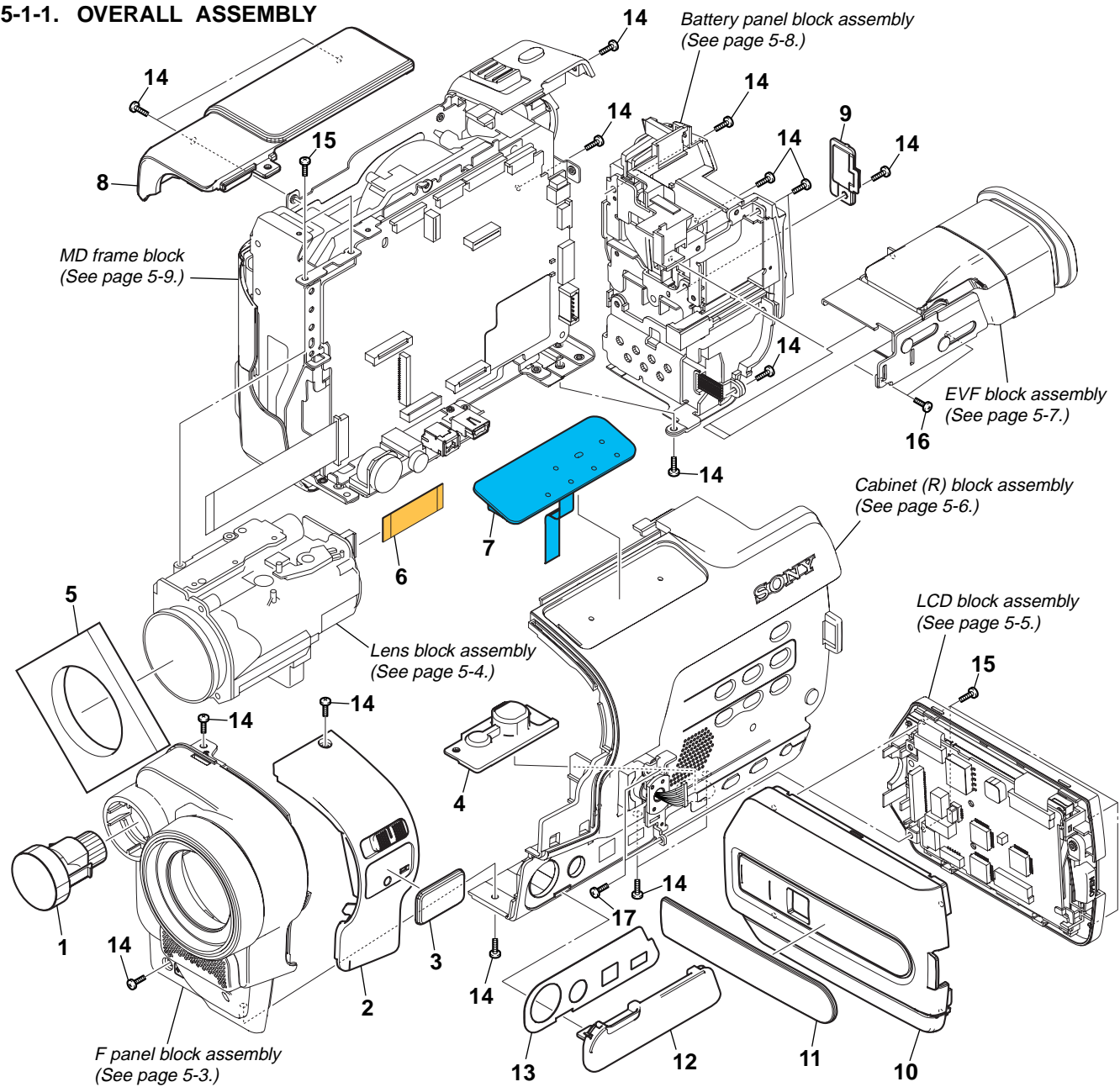
About PD-180 board and LCD module, discriminate LCD type on the machine referring to page 1-2, and replace the same type.



5. REPAIR PARTS LIST

5-1. EXPLODED VIEWS

5-1-1. OVERALL ASSEMBLY



Ref. No.	Part No.	Description
1	1-518-787-21	LIGHT, VIDEO
2	X-3953-065-1	RING (33) ASSY, ORNAMENTAL
3	3-079-010-01	PLATE (30), MAGNIFICATION
		(TRV145E/TRV147E)
3	3-079-010-21	PLATE (30), MAGNIFICATION
		(TRV245E/TRV250E)
4	3-079-012-01	SCREW (30), TRIPOD
5	3-080-217-01	CUSHION (30), LENS
6	1-683-163-21	FP-400 FLEXIBLE BOARD
7	1-477-672-31	SWITCH BLOCK, CONTROL (FK-3000)
		(TRV147E/TRV250E)
7	1-477-672-41	SWITCH BLOCK, CONTROL (FK-3000)
		(TRV145E/TRV245E)
8	3-079-011-01	CABINET UPPER (30)
9	3-079-007-01	LID (30), CPC

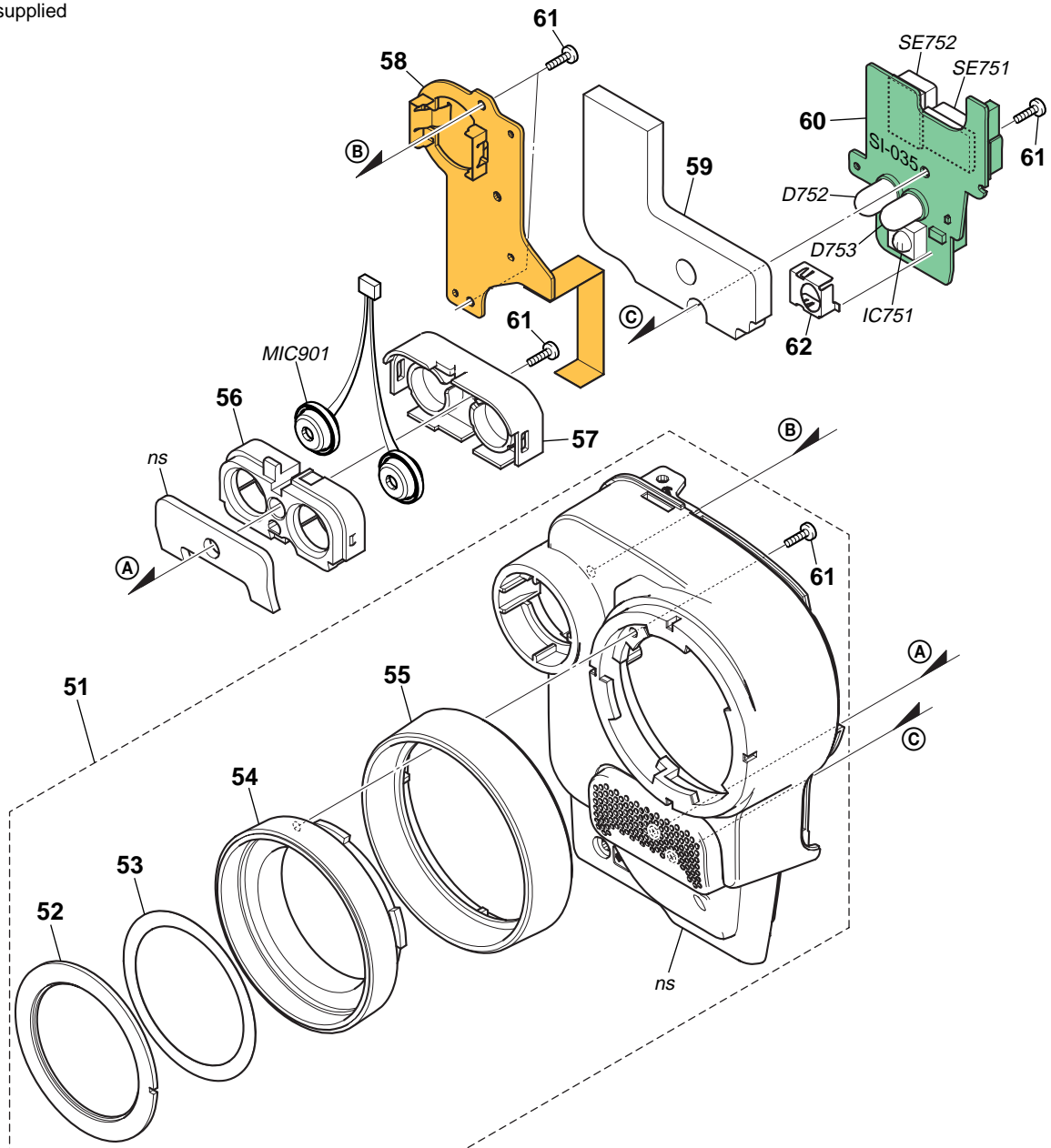
Ref. No.	Part No.	Description
10	3-079-492-12	CABINET (C) (36), P
11	X-3953-046-1	COVER (33) ASSY, CPC (TRV250E)
11	X-3953-048-1	COVER (33) ASSY, CPC (TRV147E)
11	X-3953-049-1	COVER (33) ASSY, CPC (TRV145E)
11	X-3953-050-1	COVER (33) ASSY, CPC (TRV245E)
12	3-079-008-01	COVER (30), JACK
13	3-079-396-11	SHEET (30), JACK (TRV145E)
13	3-079-396-21	SHEET (30), JACK (TRV147E)
13	3-079-396-31	SHEET (30), JACK (TRV245E)
13	3-079-396-41	SHEET (30), JACK (TRV250E)
14	3-067-347-01	MI SCREW M2 (H)
15	3-065-567-11	TAPPING (M1.7)
16	3-078-889-11	SCREW (M1.7)
17	3-065-567-01	TAPPING (M1.7)



5. REPAIR PARTS LIST

5-1-2. F PANEL BLOCK ASSEMBLY

ns: not supplied

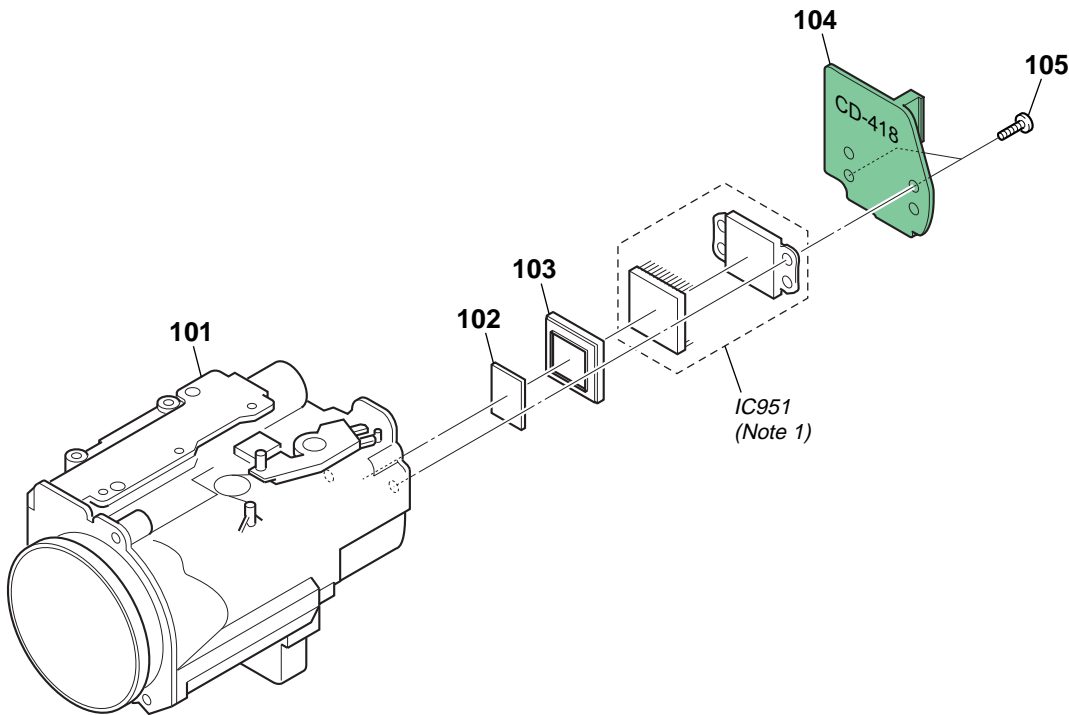


Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
51	X-3952-974-1	PANEL (33) ASSY, FRONT (TRV245E/TRV250E)	61	3-065-567-01	TAPPING (M1.7)
51	X-3952-979-1	PANEL (33) ASSY, FRONT (TRV145E/TRV147E)	62	3-079-004-01	CASE (30), SHIELD, SI (TRV245E/TRV250E)
52	3-079-000-01	PLATE (30), NAME	D752	8-719-060-65	DIODE DCC3810 (IR EMITTER)
53	3-079-001-01	SHEET (30), ADHESIVE, PLATE	D753	8-719-060-65	DIODE DCC3810 (IR EMITTER)
54	3-078-999-01	SCREW (30), FILTER	IC751	6-701-681-01	IC RPM7140-V4 (TRV245E/TRV250E)
55	3-079-002-01	RING (30), FRONT	MIC901	1-542-477-11	MICROPHONE
56	3-078-997-11	HOLDER (30), MICROPHONE	SE751	1-803-042-31	SENSOR, ANGULAR VELOCITY (TRV245E/TRV250E)
57	3-078-996-01	RETAINER (30), MICROPHONE	SE752	1-803-042-41	SENSOR, ANGULAR VELOCITY (TRV245E/TRV250E)
58	1-686-858-21	FP-575 FLEXIBLE BOARD			
59	3-080-231-01	SHEET (30), MICROPHONE			
60	A-7013-267-A	SI-035 BOARD, COMPLETE			



5. REPAIR PARTS LIST

5-1-3. LENS BLOCK ASSEMBLY



(Note 1) Be sure to read "Precautions for Replacement of CCD Imager" on page 4-8 when changing the CCD imager.

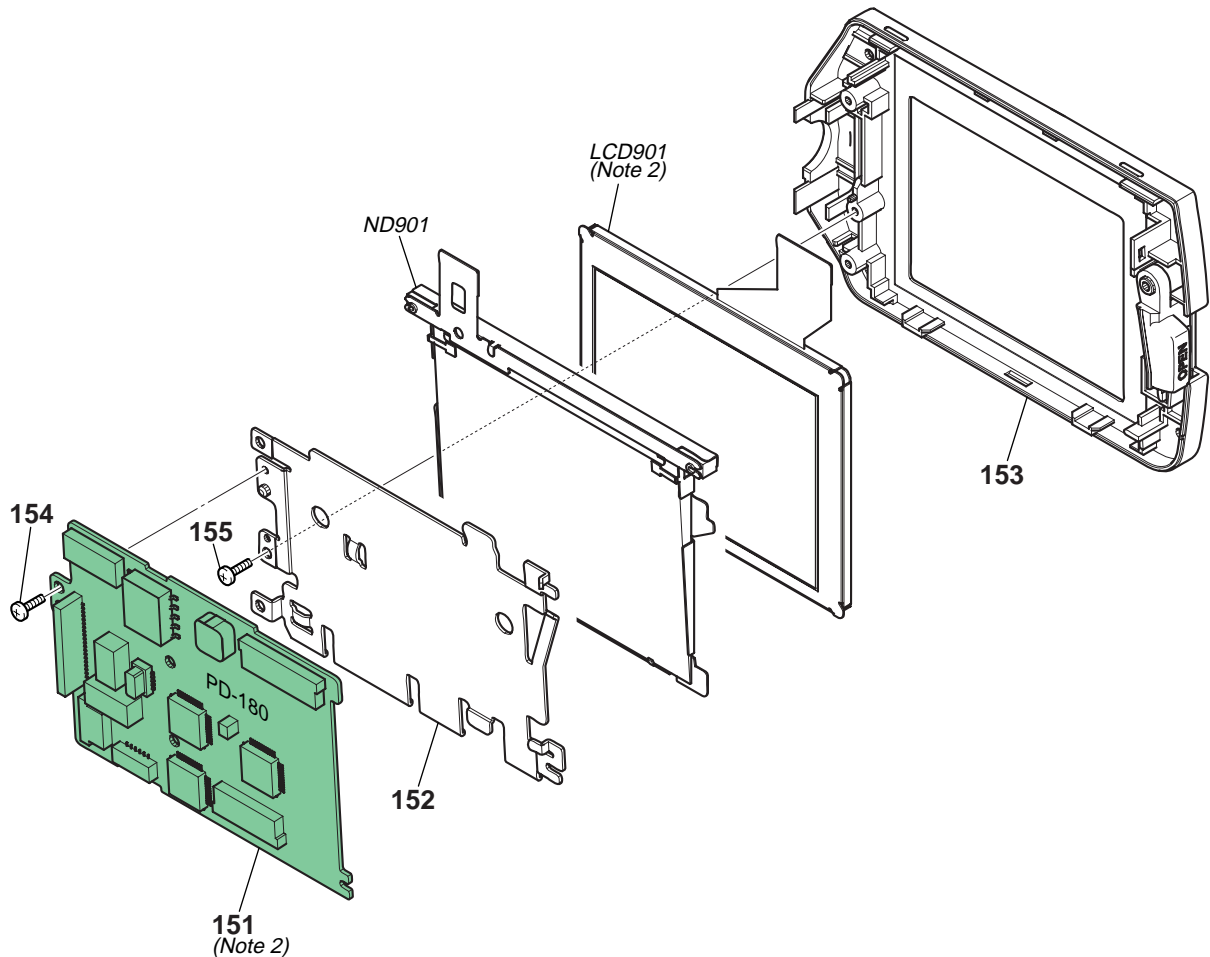
Ref. No.	Part No.	Description
101	8-848-765-01	DEVICE, LENS LSV-820A
102	1-758-554-11	FILTER BLOCK, OPTICAL
103	3-053-973-01	RUBBER (W), SEAL

Ref. No.	Part No.	Description
104	A-7013-263-A	CD-418 BOARD, COMPLETE
105	3-065-567-01	TAPPING (M1.7)
IC951	A-7013-401-A	CCD BLOCK ASSY (CCD IMAGER) (Note 1)



5. REPAIR PARTS LIST

5-1-4. LCD BLOCK ASSEMBLY



(Note 2) About PD-180 board and LCD module, discriminate LCD type on the machine referring to page 1-2, and replace the same type.

The components identified by mark \triangle or dotted line with mark \triangle are critical for safety.
Replace only with part number specified.

Ref. No.	Part No.	Description
151	A-7013-265-A	PD-180 BOARD, COMPLETE (TYPE C) (Note 2)
151	A-7013-266-A	PD-180 BOARD, COMPLETE (TYPE S) (Note 2)
152	3-079-032-01	FRAME (30), P
153	X-3952-955-1	CABINET (M) (30) ASSY, P
154	3-078-889-11	SCREW (M1.7)

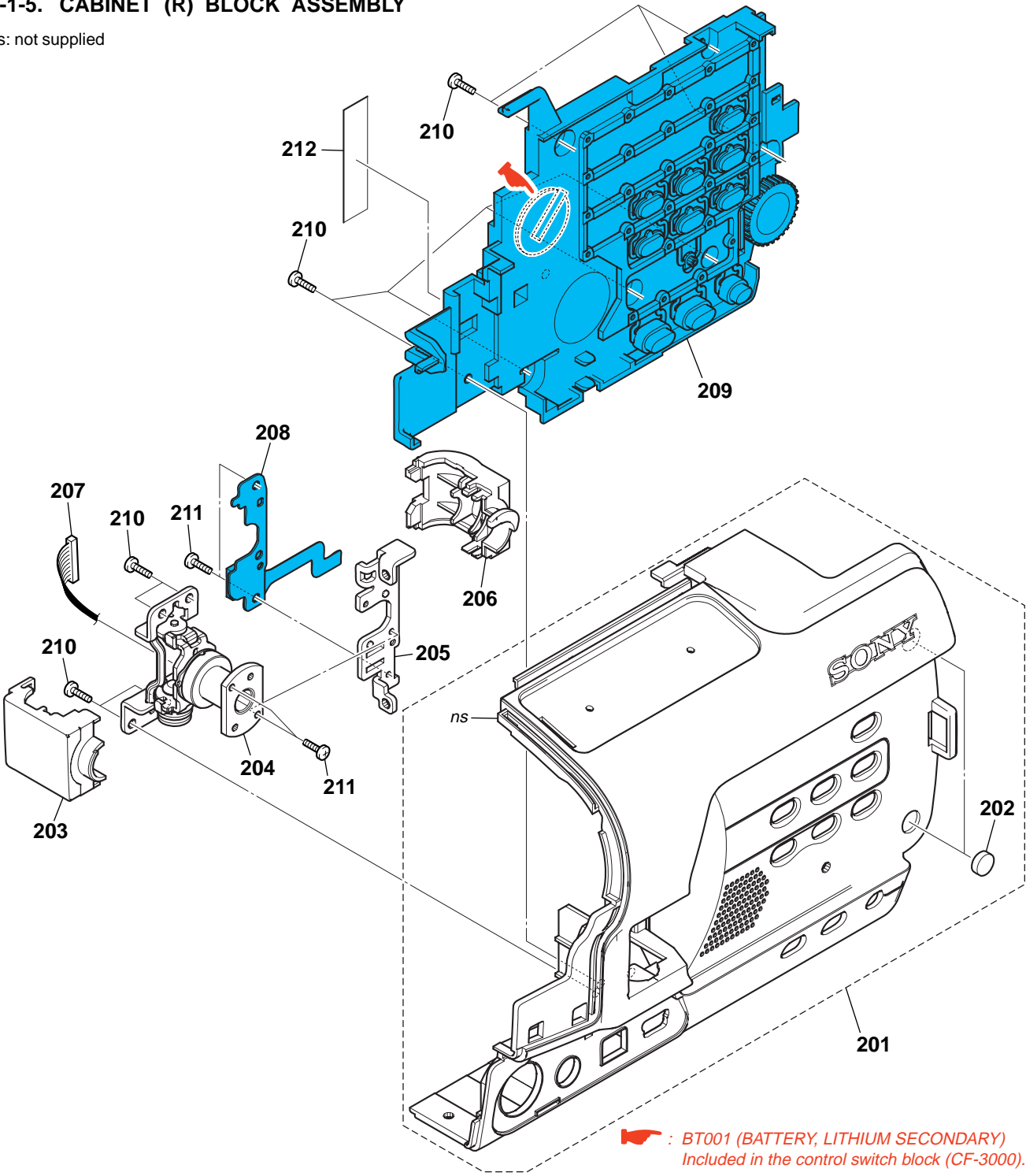
Ref. No.	Part No.	Description
155	3-065-567-11	TAPPING (M1.7)
LCD901	1-805-137-21	INDICATOR MODULE LIQUID CRYSTAL (TYPE S) (Note 2)
LCD901	1-805-138-21	INDICATOR MODULE LIQUID CRYSTAL (TYPE C) (Note 2)
\triangle ND901	1-518-798-21	TUBE, FLUORESCENT, COLD CATHODE



5. REPAIR PARTS LIST

5-1-5. CABINET (R) BLOCK ASSEMBLY

ns: not supplied



 : BT001 (BATTERY, LITHIUM SECONDARY)
Included in the control switch block (CF-3000).

Ref. No.	Part No.	Description
201	X-3953-038-1	CABINET (R) (33) ASSY
202	3-959-978-02	CUSHION, PANEL
203	3-079-059-11	COVER (C) (30), HINGE
204	X-3952-973-1	HINGE (30) ASSY
205	3-079-057-01	BRACKET (30), HINGE
206	3-079-058-01	COVER (M) (30), HINGE

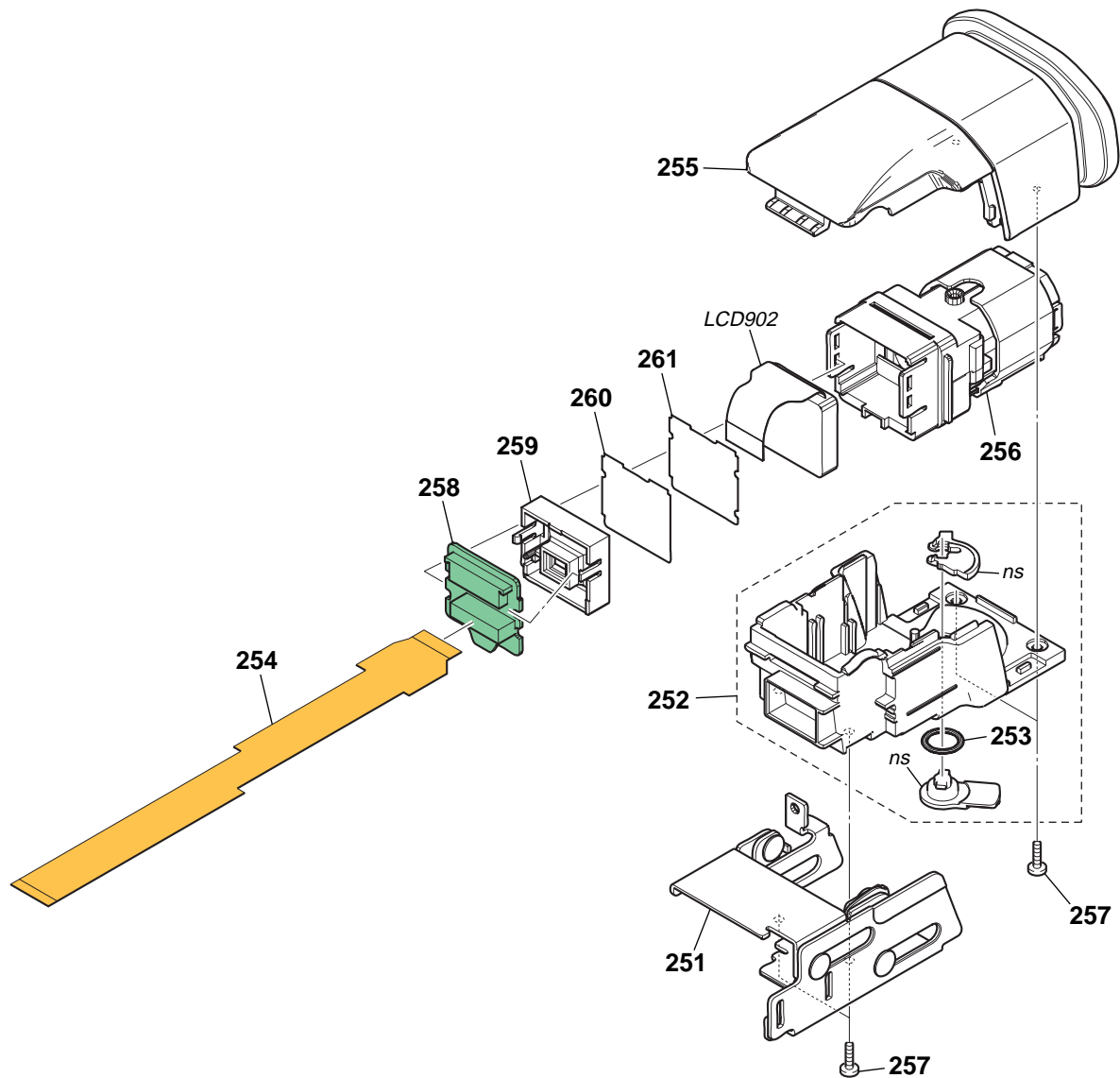
Ref. No.	Part No.	Description
207	1-961-989-11	HARNESS (PD-118)
208	1-477-675-11	SWITCH BLOCK, CONTROL (PR-3000)
209	1-477-673-21	SWITCH BLOCK, CONTROL (CF-3000)
210	3-080-205-21	SCREW, TAPPING, P2
211	3-989-735-41	SCREW (M1.7), LOCK ACE, P2
212	3-941-343-21	TAPE (A)



5. REPAIR PARTS LIST

5-1-6. EVF BLOCK ASSEMBLY

ns: not supplied



Ref. No.	Part No.	Description
251	X-3952-968-1	HINGE (30) ASSY, VF
252	X-3952-969-1	CABINET (LOWER) (30) ASSY, EVF
253	3-950-044-01	RING, O
254	1-686-854-11	FP-571 FLEXIBLE BOARD
255	X-3952-957-4	CABINET (UPPER) (30) ASSY, EVF
256	X-3952-214-1	LENS (B) ASSY, VF

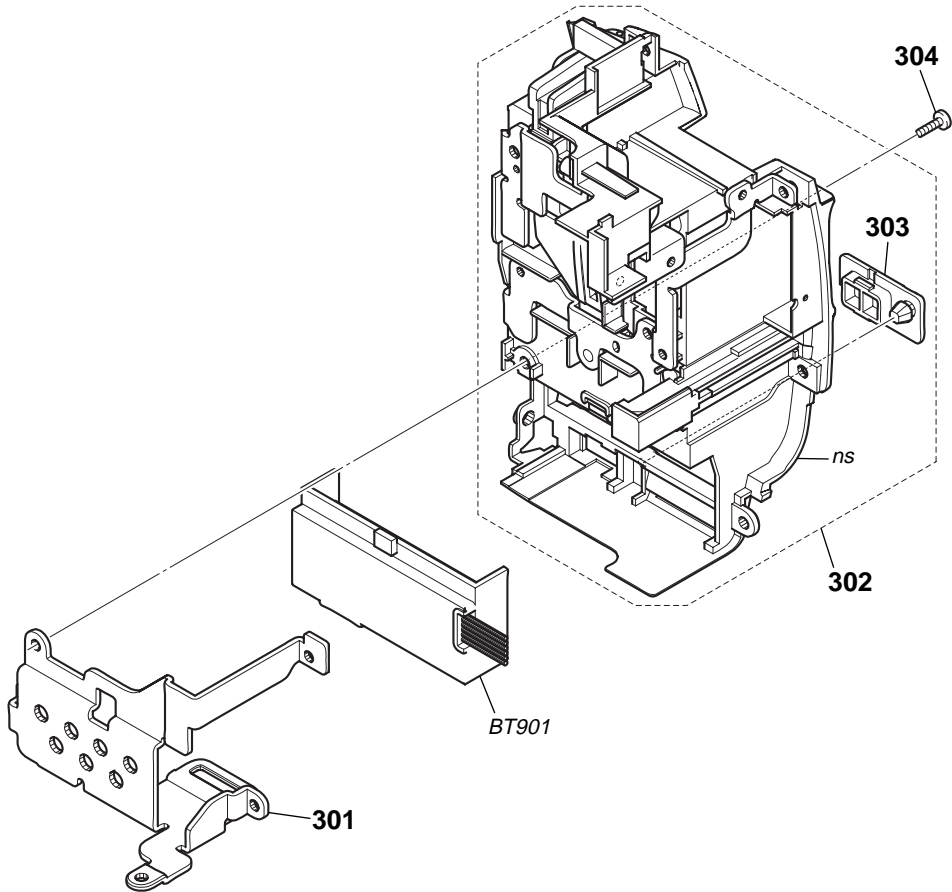
Ref. No.	Part No.	Description
257	3-065-567-01	TAPPING (M1.7)
258	A-7013-264-A	LB-090 BOARD, COMPLETE
259	3-065-058-01	GUIDE, LAMP
260	3-072-211-01	ILLUMINATOR
261	3-072-210-01	SHEET, PRISM
LCD902	8-753-028-49	LCX032AP-5



5. REPAIR PARTS LIST

5-1-7. BATTERY PANEL BLOCK ASSEMBLY

ns: not supplied



Ref. No.	Part No.	Description
301	3-079-039-01	SHEET METAL (LOWER), STRAP (30)
302	X-3952-954-1	PANEL (30) ASSY, BATTERY
303	3-072-305-01	LID (2500), JACK

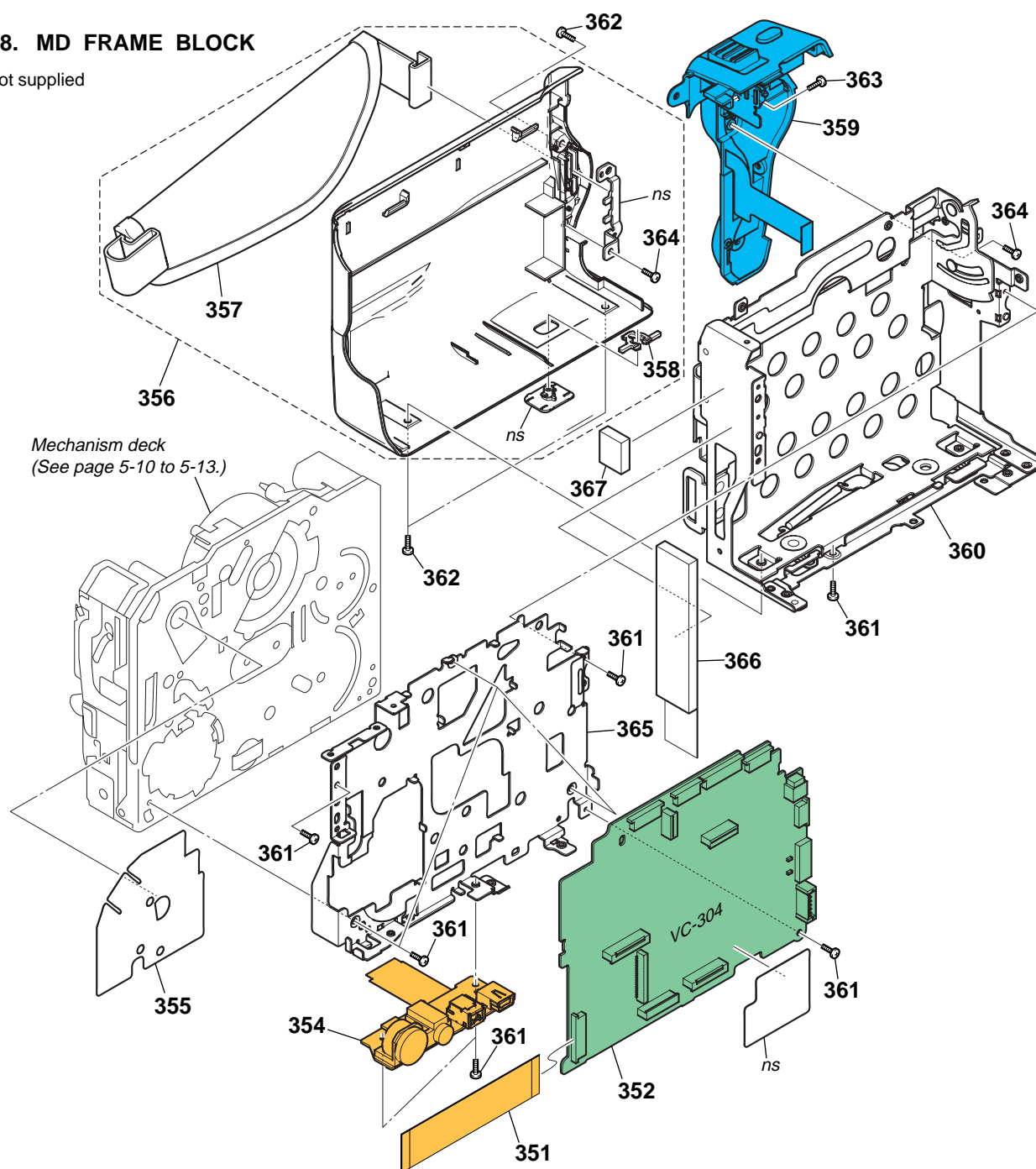
Ref. No.	Part No.	Description
304	3-067-347-01	MI SCREW M2 (H)
BT901	1-694-772-11	TERMINAL BOARD, BATTERY



5. REPAIR PARTS LIST

5-1-8. MD FRAME BLOCK

ns: not supplied



Ref. No.	Part No.	Description
351	1-686-856-11	FP-573 FLEXIBLE BOARD
352	A-7013-496-A	VC-304 BOARD, COMPLETE (SERVICE) (TRV145E/TRV147E)
352	A-7013-498-A	VC-304 BOARD, COMPLETE (SERVICE) (TRV245E/TRV250E)
354	1-686-862-21	FP-577 FLEXIBLE BOARD (TRV245E/TRV250E)
354	1-686-862-31	FP-577 FLEXIBLE BOARD (TRV145E/TRV147E)
355	3-066-169-01	SHEET (30), MD
356	X-3953-081-1	CABINET (L) (33) ASSY
357	3-052-815-01	BELT (ES), GRIP
358	3-978-765-01	SLIDER, G LOCK
359	1-477-674-31	SWITCH BLOCK, CONTROL (SS-3000) (TRV147E/TRV250E)

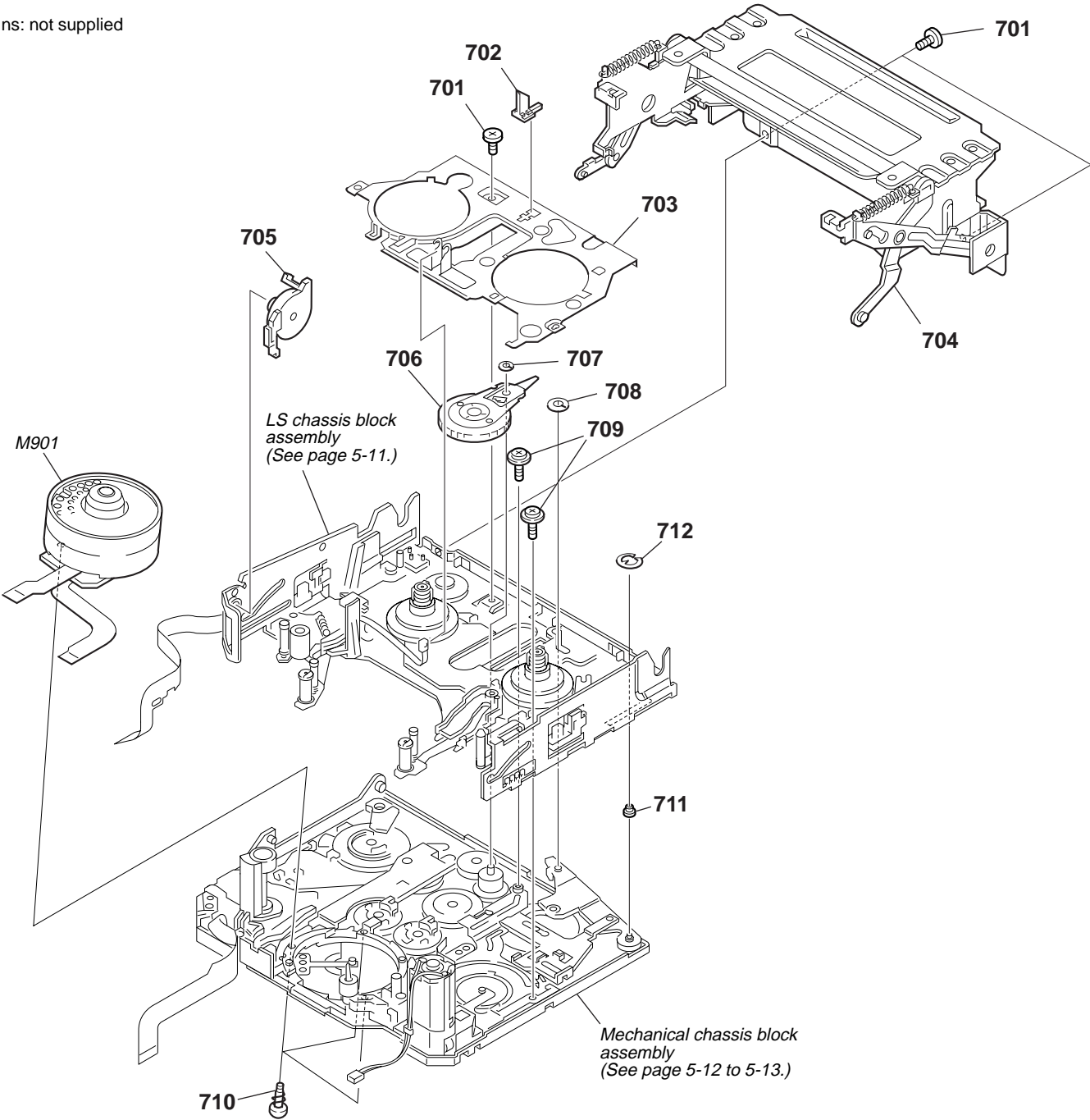
Ref. No.	Part No.	Description
359	1-477-674-41	SWITCH BLOCK, CONTROL (SS-3000) (TRV145E/TRV245E)
360	X-3952-970-1	FRAME ASSY (30), CS
361	3-078-889-11	SCREW (M1.7)
362	3-067-347-01	MI SCREW M2 (H)
363	3-080-221-21	SCREW (M2), ES LOCK
364	3-065-567-01	TAPPING (M1.7)
365	3-079-006-01	FRAME (30), MD
366	3-079-176-01	COVER, MD (30)
367	3-081-243-02	SHEET (LT), RADIATION



5. REPAIR PARTS LIST

5-1-9. CASSETTE COMPARTMENT ASSEMBLY, DRUM ASSEMBLY

ns: not supplied



Ref. No.	Part No.	Description
701	3-065-932-01	PAN (2 MAIN M1.4X1.6), CAMERA
702	3-065-895-01	LEVER, REEL RELEASE
703	3-065-896-01	PLATE, BLIND
704	X-3951-298-1	CASSETTE COMPARTMENT ASSY
705	X-3951-302-1	DAMPER ASSY
706	X-3951-297-1	GEAR ASSY, R DRIVE
707	3-065-840-01	CUT (0.98X3X0.13), LUMILER (W)

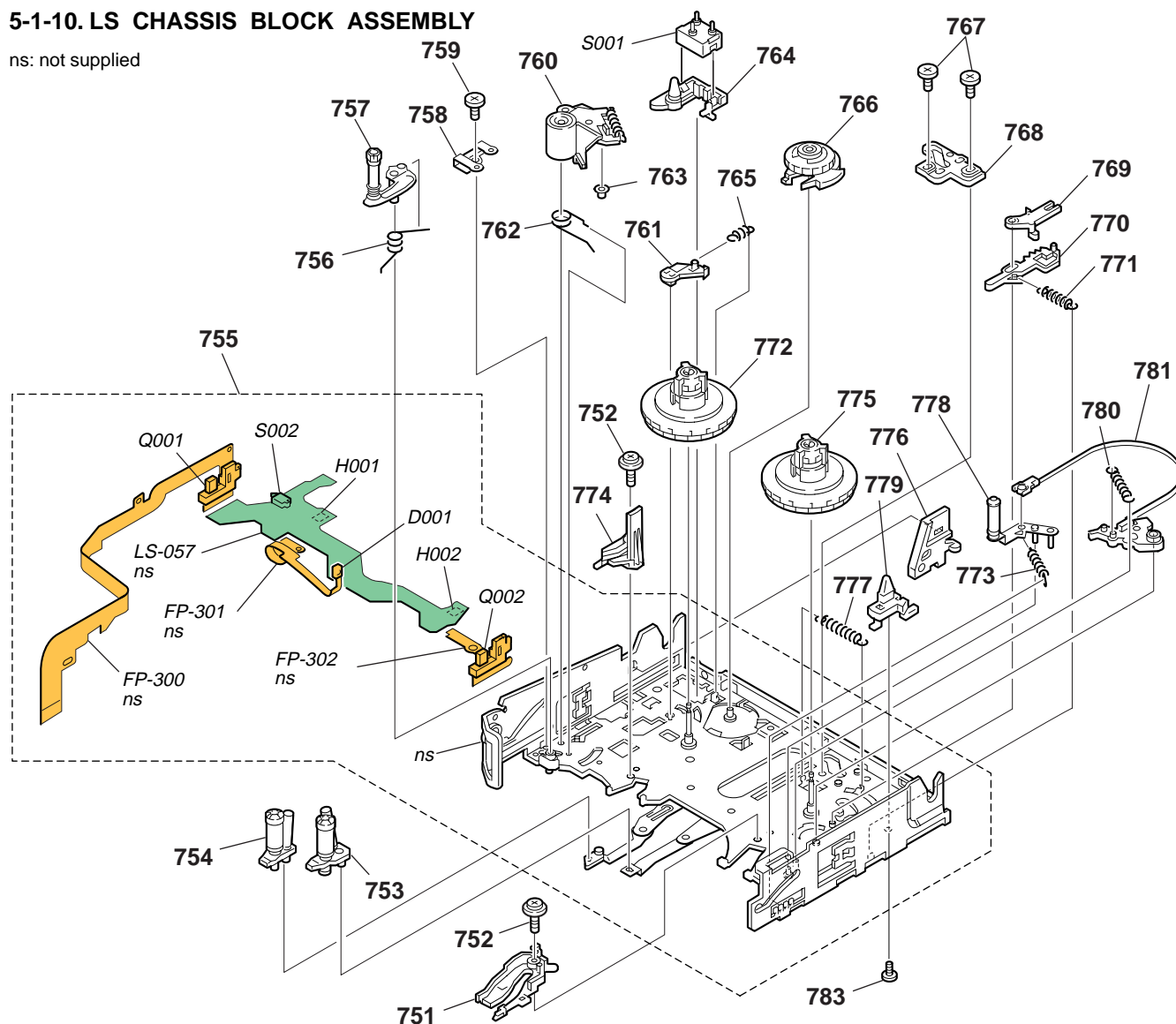
Ref. No.	Part No.	Description
708	3-065-935-01	HLC CUT 1.8X4X0.5
709	3-947-503-01	SCREW (M1.4)
710	X-3951-299-1	SCREW ASSY, DRUM FITTING
711	3-074-309-01	ROLLER A, LS GUIDE
712	7-624-101-04	STOP RING 1.2 (E TYPE)
M901	A-7048-951-A	DRUM (DKH-04A-R) (SERVICE)



5. REPAIR PARTS LIST

5-1-10. LS CHASSIS BLOCK ASSEMBLY

ns: not supplied



Ref. No.	Part No.	Description
751	3-065-822-02	RAIL (S), GUIDE
752	3-947-503-01	SCREW (M1.4)
753	A-7096-416-B	BASE (S) BLOCK ASSY, GUIDE
754	A-7096-415-A	BASE (T) BLOCK ASSY, GUIDE
755	A-7096-426-A	CHASSIS ASSY, LS
756	3-065-802-01	SPRING, TG7 ARM
757	A-7096-414-A	ARM BLOCK ASSY, TG7
758	3-065-801-01	RETAINER, TG7
759	3-065-932-01	PAN (2 MAIN M1.4X1.6), CAMERA
760	X-3951-303-1	ARM ASSY, PINCH
761	3-065-823-01	ARM, T RATCHET
762	3-065-794-01	ROAD (SPR), PINCH ARM
763	3-065-792-01	ROLLER, P LIM ARM
764	3-065-834-01	GUIDE (T), CASSETTE
765	3-065-824-01	SPRING, T RATCHET
766	A-7096-417-A	SOFT ASSY, T
767	3-071-650-01	SCREW (M1.7) (S)
768	3-065-832-01	PLATE, LS CAM
769	3-065-828-01	ARM, S RATCHET
770	3-065-829-01	PLATE, S RATCHET (RE)

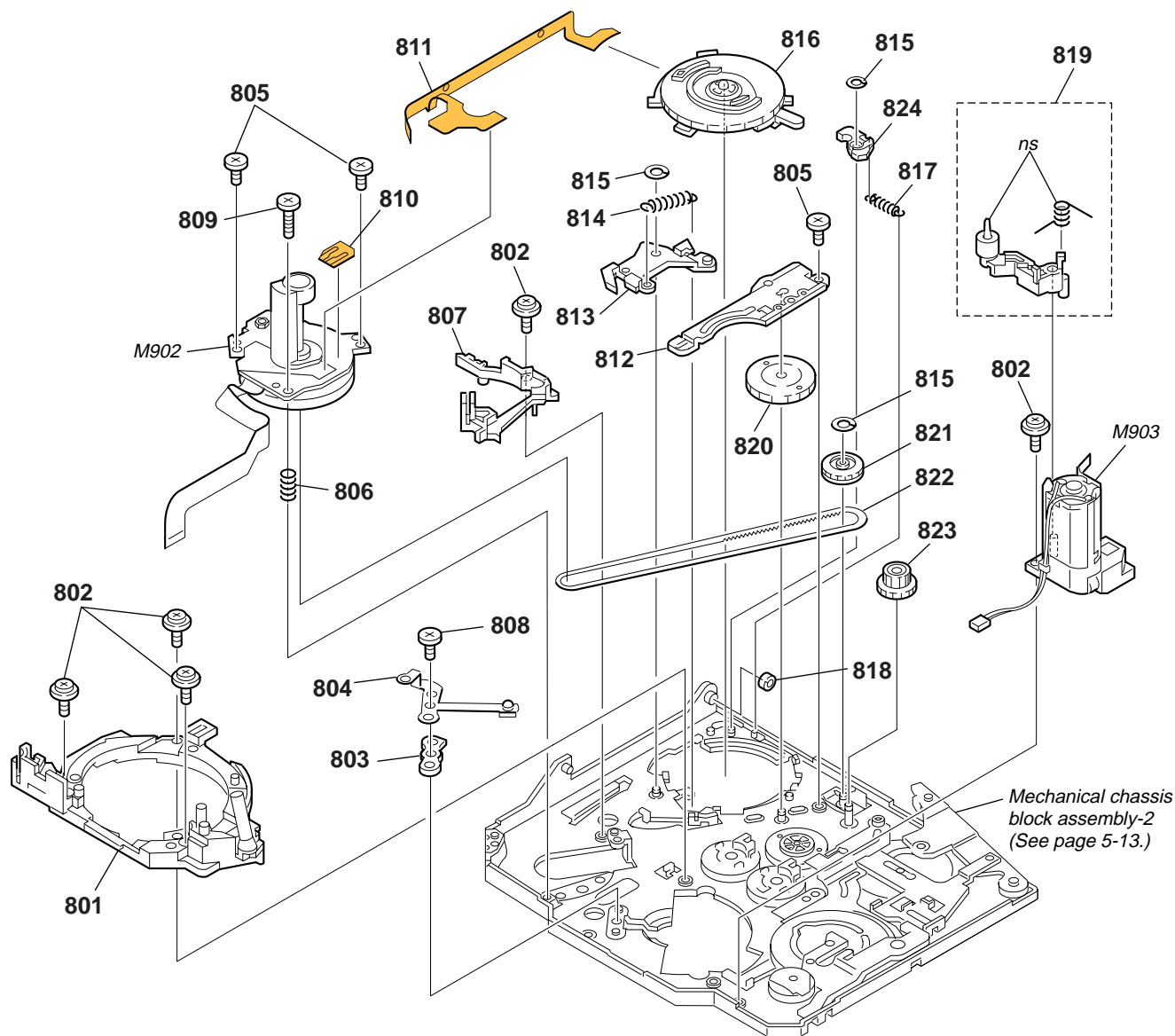
Ref. No.	Part No.	Description
771	3-065-830-01	SPRING, S RATCHET
772	X-3951-288-1	TABLE (T) ASSY, REEL
773	3-065-819-01	SPRING, TG1 ARM
774	3-065-821-01	RAIL (T), GUIDE
775	X-3951-289-1	TABLE (S) ASSY, REEL
776	3-065-833-01	GUIDE, LOCK
777	3-065-831-01	PLATE (SPR), RE RETURN
778	X-3951-304-1	ARM ASSY, TG1
779	3-065-835-01	GUIDE (S), CASSETTE
780	3-065-820-01	SPRING, RVS ARM
781	X-3951-296-1	BAND (ASSY), BT
783	3-067-167-01	SCREW (M1.4X2), CAMERA TAPPING
D001	8-719-988-42	DIODE GL453 (TAPE LED)
H001	8-719-033-37	ELEMENT, HALL HW-105C (T REEL)
H002	8-719-033-37	ELEMENT, HALL HW-105C (S REEL)
Q001	8-729-907-25	PHOTO TRANSISTOR PT4850F (TAPE TOP)
Q002	8-729-907-25	PHOTO TRANSISTOR PT4850F (TAPE END)
S001	1-692-614-11	SWITCH, PUSH (3 KEY) (REC PROOF)
S002	1-572-688-11	SWITCH, PUSH LEVER (1 KEY) (C. C. LOCK)



5. REPAIR PARTS LIST

5-1-11. MECHANICAL CHASSIS BLOCK ASSEMBLY-1

ns: not supplied



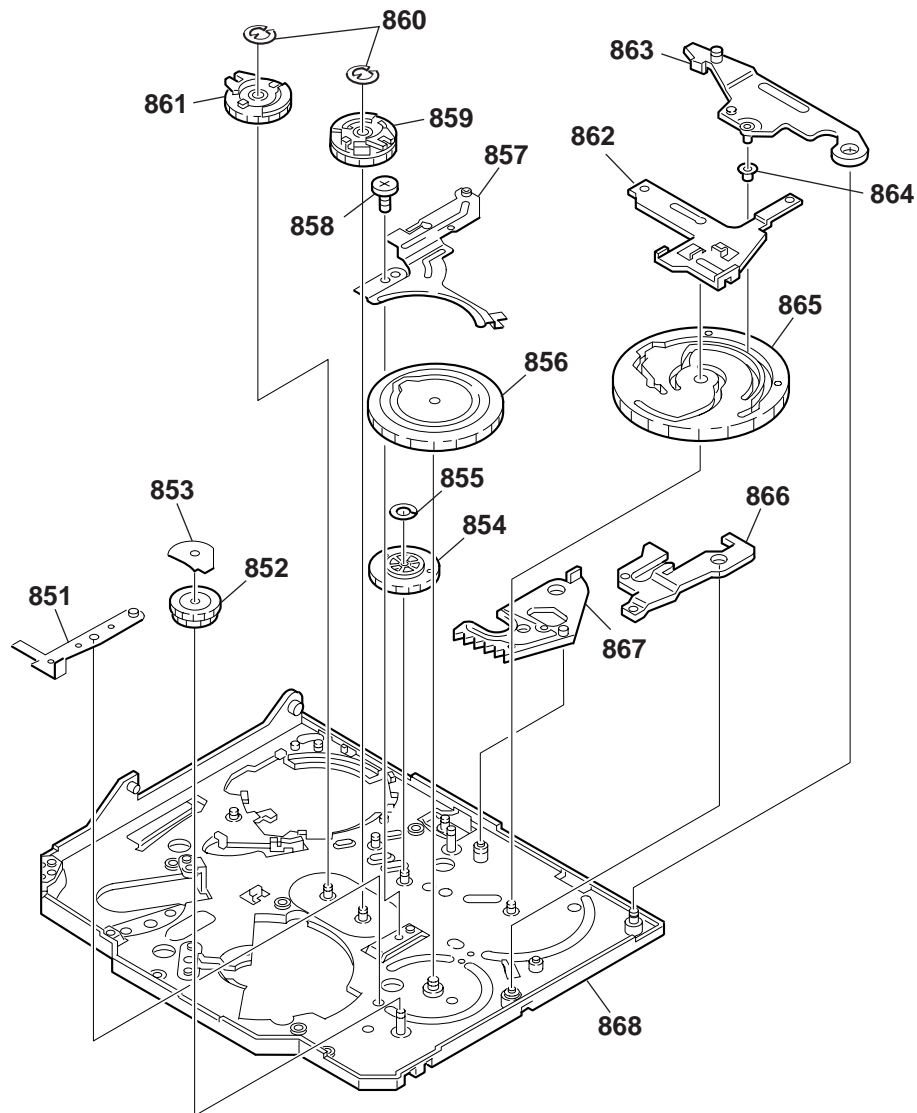
Ref. No.	Part No.	Description
801	A-7096-422-A	BASE ASSY, DRUM
802	3-947-503-01	SCREW (M1.4)
803	3-065-928-01	SPACER, GROUND
804	3-065-927-01	GROUND, DRUM
805	3-065-932-01	PAN (2 MAIN M1.4X1.6), CAMERA
806	3-067-154-01	SPRING, CAPSTAN
807	3-065-931-01	RAIL (T2), GUIDE
808	X-3947-398-1	SCREW ASSY, M1.7 PW
809	3-065-933-01	PAN (2 MAIN 1.4X4.5), CAMERA
810	1-677-049-11	FP-228 FLEXIBLE BOARD
811	1-680-434-11	FP-299 FLEXIBLE BOARD
812	3-065-877-01	PLATE (T), GUIDE LOCK
813	X-3951-301-1	PLATE ASSY, PINCH PRESSURE

Ref. No.	Part No.	Description
814	3-065-881-01	SPRING, P PRESSURE PLATE
815	3-065-934-01	HLW CUT 0.98X3X0.25
816	1-786-096-11	SWITCH, ROTARY
817	3-065-898-01	SPRING, EJECT ARM
818	3-065-870-01	ROLLER, LS GUIDE
819	A-7096-421-A	ARM ASSY, HCL
820	3-065-918-01	GEAR (2), CAM RELAY
821	A-7096-419-A	GEAR ASSY, CHANGE
822	3-065-902-01	BELT, TIMING
823	3-065-905-01	GEAR, RELAY
824	3-065-882-01	ARM, EJECT
M902	8-835-701-01	MOTOR, DC SCE13A/C-NP (CAPSTAN)
M903	A-7096-420-A	MOTOR ASSY, LD (LOADING)



5. REPAIR PARTS LIST

5-1-12. MECHANICAL CHASSIS BLOCK ASSEMBLY-2



Ref. No.	Part No.	Description
851	3-065-920-01	ARM, HC DRIVE
852	3-065-913-01	GEAR (4), LD
853	3-065-914-01	SHEET, COVER
854	3-065-917-01	GEAR (1), CAM RELAY
855	3-065-934-01	HLW CUT 0.98X3X0.25
856	3-065-915-01	GEAR (1), CAM
857	3-065-878-01	PLATE (S), GUIDE LOCK
858	3-065-932-01	PAN (2 MAIN M1.4X1.6), CAMERA
859	A-7096-413-A	GEAR (S) ASSY, GUIDE

Ref. No.	Part No.	Description
860	7-624-101-04	STOP RING 1.2 (E TYPE)
861	A-7096-412-A	GEAR (T) ASSY, GUIDE
862	X-3951-307-1	PLATE ASSY, M SLIDE
863	X-3951-305-1	ARM ASSY, LS
864	3-065-901-01	ROLLER, LS ARM
865	3-065-916-01	GEAR (2), CAM
866	3-065-919-01	ARM, T1 LIMITTER
867	X-3951-308-1	ARM ASSY, GL
868	X-3951-300-2	CHASSIS ASSY, MECHANICAL

CD-418	FP-300	FP-301	FP-302	LB-090	LS-057	PD-180 (TYPE C)
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5-2. ELECTRICAL PARTS LIST

Ref. No.	Part No.	Description
A-7013-263-A	CD-418 BOARD, COMPLETE	< CONNECTOR >

(IC951 is not include in this complete board.)		
< CAPACITOR >		
C951	1-126-395-11	ELECT 22uF 20% 16V
C953	1-128-994-21	ELECT CHIP 47uF 20% 10V
C955	1-164-360-11	CERAMIC CHIP 0.1uF 16V
< CONNECTOR >		
CN951	1-779-331-11	CONNECTOR, FFC/FPC 14P
< IC >		
IC951	A-7013-401-A	CCD BLOCK ASSY (CCD IMAGER) (Note)
< COIL >		
L951	1-469-528-91	INDUCTOR 100uH
< TRANSISTOR >		
Q951	8-729-117-73	TRANSISTOR 2SC4178-F14
< RESISTOR >		
R952	1-218-940-11	RES-CHIP 82 5% 1/16W
R953	1-218-959-11	RES-CHIP 3.3K 5% 1/16W
R961	1-218-990-11	SHORT CHIP 0
R963	1-218-990-11	SHORT CHIP 0
R965	1-218-990-11	SHORT CHIP 0
FP-300 FLEXIBLE BOARD (Not Supplied)		

< PHOTO TRANSISTOR >		
Q001	8-729-907-25	PHOTO TRANISTOR PT4850F (TAPE TOP)
FP-301 FLEXIBLE BOARD (Not Supplied)		

< DIODE >		
D001	8-719-988-42	DIODE GL453 (TAPE LED)
FP-302 FLEXIBLE BOARD (Not Supplied)		

< PHOTO TRANSISTOR >		
Q002	8-729-907-25	PHOTO TRANISTOR PT4850F (TAPE END)
A-7013-264-A LB-090 BOARD, COMPLETE		

< CAPACITOR >		
C701	1-164-505-11	CERAMIC CHIP 2.2uF 16V

Ref. No.	Part No.	Description
< CONNECTOR >		
CN701	1-779-334-11	CONNECTOR, FFC/FPC 20P
CN702	1-691-354-21	CONNECTOR, FFC/FPC (ZIF) 16P
< DIODE >		
D701	8-719-082-33	DIODE NSCW100-T38 (BACKLIGHT)
D702	6-500-506-01	DIODE TLRMV1021 (T15SOY, F) (TALLY)
< IC >		
IC701	8-759-581-11	IC NJM2125F (TE2)
< TRANSISTOR >		
Q701	8-729-054-48	TRANSISTOR UP04601008S0
< RESISTOR >		
R701	1-208-941-11	METAL CHIP 180K 0.5% 1/16W
R702	1-208-719-11	METAL CHIP 33K 0.5% 1/16W
R703	1-218-956-11	RES-CHIP 1.8K 5% 1/16W
R704	1-211-977-11	METAL CHIP 22 0.5% 1/10W
LS-057 BOARD (Not Supplied)		

< HALL ELEMENT >		
H001	8-719-033-37	ELEMENT, HALL HW-105C (T REL)
H002	8-719-033-37	ELEMENT, HALL HW-105C (S REL)
< SWITCH >		
S001	1-692-614-11	SWITCH, PUSH (3 KEY) (REC PROOF)
S002	1-572-688-11	SWITCH, PUSH LEVER (1 KEY) (C. C. LOCK)
A-7013-265-A PD-180 BOARD, COMPLETE (TYPE C)		

< CAPACITOR >		
C5503	1-119-750-11	TANTAL. CHIP 22uF 20% 6.3V
C5504	1-164-943-11	CERAMIC CHIP 0.01uF 10% 16V
C5505	1-164-943-11	CERAMIC CHIP 0.01uF 10% 16V
C5506	1-164-943-11	CERAMIC CHIP 0.01uF 10% 16V
C5507	1-164-943-11	CERAMIC CHIP 0.01uF 10% 16V
C5509	1-110-457-11	ELECT CHIP 3.3uF 20% 25V
C5510	1-164-943-11	CERAMIC CHIP 0.01uF 10% 16V
C5511	1-164-739-11	CERAMIC CHIP 560PF 5% 50V
C5512	1-125-777-11	CERAMIC CHIP 0.1uF 10% 10V
C5513	1-164-943-11	CERAMIC CHIP 0.01uF 10% 16V
C5514	1-119-750-11	TANTAL. CHIP 22uF 20% 6.3V
C5515	1-164-937-11	CERAMIC CHIP 0.001uF 10% 50V
C5516	1-164-874-11	CERAMIC CHIP 100PF 5% 50V
C5517	1-107-826-11	CERAMIC CHIP 0.1uF 10% 16V
C5518	1-107-826-11	CERAMIC CHIP 0.1uF 10% 6V
C5519	1-107-826-11	CERAMIC CHIP 0.1uF 10% 16V
C5520	1-115-407-11	ELECT CHIP 10uF 20% 16V
C5521	1-127-573-11	CERAMIC CHIP 1uF 10% 16V
C5524	1-127-573-11	CERAMIC CHIP 1uF 10% 16V
C5527	1-164-943-11	CERAMIC CHIP 0.01uF 10% 16V

(Note) Be sure to read "Precautions for Replacement of CCD Imager" on page 4-8 when changing the CCD imager.

PD-180 (TYPE C)

PD-180 (TYPE S)

Ref. No.	Part No.	Description			
C5603	1-164-657-11	CERAMIC CHIP	0.015uF	10%	50V
C5604	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C5605	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
△ C5606	1-100-371-11	CERAMIC CHIP	12PF	5%	3.15KV
C5607	1-115-566-11	CERAMIC CHIP	4.7uF	10%	0V
< CONNECTOR >					
CN5501	1-815-031-11	CONNECTOR, FFC/FPC (ZIF) 24P			
* CN5502	1-573-984-11	CONNECTOR, BOARD TO BOARD 10P			
CN5601	1-764-709-11	CONNECTOR, FFC/FPC (LIF) 10P			
CN5701	1-794-998-31	PIN, CONNECTOR 20P			
CN5702	1-816-176-11	CONNECTOR, FFC/FPC (ZIF) 6P			
< DIODE >					
D5502	8-719-084-47	DIODE 1SV290 (TPL3)			
D5601	8-719-988-61	DIODE 1SS355TE-17			
< IC >					
IC5501	8-752-102-40	IC CXA3592R-T4			
IC5502	8-759-833-18	IC CM7021L3-E2			
IC5601	8-759-564-49	IC TC7W53FU (TE12R)			
IC5602	8-759-075-70	IC TA75S393F			
< COIL >					
L5501	1-469-526-91	INDUCTOR	22uH		
L5503	1-412-949-21	INDUCTOR	6.8uH		
L5601	1-428-878-11	INDUCTOR	82uH		
L5602	1-412-056-11	INDUCTOR	4.7uH		
< TRANSISTOR >					
Q5601	6-550-234-01	TRANSISTOR UNR32A300LS0			
Q5602	6-550-083-01	TRANSISTOR TPC6C01 (TE85R)			
< RESISTOR >					
R5501	1-218-985-11	RES-CHIP	470K	5%	1/16W
R5503	1-208-933-11	METAL CHIP	82K	0.5%	1/16W
R5505	1-218-967-11	RES-CHIP	15K	5%	1/16W
R5506	1-218-958-11	RES-CHIP	2.7K	5%	1/16W
R5507	1-218-973-11	RES-CHIP	47K	5%	1/16W
R5508	1-218-975-11	RES-CHIP	68K	5%	1/16W
R5509	1-218-969-11	RES-CHIP	22K	5%	1/16W
R5510	1-218-975-11	RES-CHIP	68K	5%	1/16W
R5511	1-218-989-11	RES-CHIP	1M	5%	1/16W
R5512	1-218-977-11	RES-CHIP	100K	5%	1/16W
R5514	1-218-990-11	SHORT CHIP	0		
R5516	1-218-962-11	RES-CHIP	5.6K	5%	1/16W
R5517	1-218-978-11	RES-CHIP	120K	5%	1/16W
R5518	1-218-990-11	SHORT CHIP	0		
R5520	1-218-990-11	SHORT CHIP	0		
R5521	1-218-973-11	RES-CHIP	47K	5%	1/16W
R5522	1-218-959-11	RES-CHIP	3.3K	5%	1/16W
R5525	1-218-990-11	SHORT CHIP	0		
R5528	1-218-990-11	SHORT CHIP	0		
R5529	1-218-990-11	SHORT CHIP	0		
R5530	1-218-990-11	SHORT CHIP	0		
R5534	1-218-990-11	SHORT CHIP	0		
R5542	1-414-760-21	FERRITE	0uH (Note)		
R5543	1-216-864-11	METAL CHIP	0	5%	1/16W

Ref. No.	Part No.	Description				
R5544	1-414-760-21	FERRITE	0uH (Note)			
R5602	1-218-977-11	RES-CHIP	100K	5%	1/16W	
R5603	1-218-966-11	RES-CHIP	12K	5%	1/16W	
R5606	1-218-969-11	RES-CHIP	22K	5%	1/16W	
R5607	1-218-949-11	RES-CHIP	470	5%	1/16W	
R5610	1-216-824-11	METAL CHIP	1.8K	5%	1/16W	
< COMPOSITION CIRCUIT BLOCK >						
RB5501	1-234-372-21	RES, NETWORK 100 x4 (1005)				
RB5601	1-234-378-21	RES, NETWORK 10K x4 (1005)				
< TRANSFORMER >						
△ T5601	1-435-786-31	TRANSFORMER, INVERTER				
A-7013-266-A PD-180 BOARD, COMPLETE (TYPE S)						

< CAPACITOR >						
C5503	1-119-750-11	TANTAL. CHIP	22uF	20%	6.3V	
C5504	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V	
C5505	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V	
C5506	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V	
C5507	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V	
C5509	1-110-457-11	ELECT CHIP	3.3uF	20%	25V	
C5510	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V	
C5511	1-164-739-11	CERAMIC CHIP	560PF	5%	50V	
C5512	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V	
C5513	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V	
C5514	1-119-750-11	TANTAL. CHIP	22uF	20%	6.3V	
C5515	1-164-937-11	CERAMIC CHIP	0.001uF	10%	50V	
C5516	1-164-870-11	CERAMIC CHIP	68PF	5%	50V	
C5517	1-107-826-11	CERAMIC CHIP	0.1uF	100%	16V	
C5518	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	
C5519	1-107-826-11	CERAMIC CHIP	0.1uF	10%	6V	
C5520	1-115-407-11	ELECT CHIP	10uF	20%	16V	
C5521	1-127-573-11	CERAMIC CHIP	1uF	10%	16V	
C5524	1-127-573-11	CERAMIC CHIP	1uF	10%	16V	
C5527	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V	
C5528	1-125-827-91	CERAMIC CHIP	1uF	10%	25V	
C5530	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V	
C5531	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V	
C5603	1-164-657-11	CERAMIC CHIP	0.015uF	10%	50V	
C5604	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V	
C5605	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V	
△ C5606	1-100-371-11	CERAMIC CHIP	12PF	5%	3.15KV	
C5607	1-115-566-11	CERAMIC CHIP	4.7uF	10%	10V	
< CONNECTOR >						
CN5501	1-815-031-11	CONNECTOR, FFC/FPC (ZIF) 24P				
* CN5502	1-573-984-11	CONNECTOR, BOARD TO BOARD 10P				
CN5601	1-764-709-11	CONNECTOR, FFC/FPC (LIF) 10P				
CN5701	1-794-998-31	PIN, CONNECTOR 20P				
CN5702	1-816-176-11	CONNECTOR, FFC/FPC (ZIF) 6P				
< DIODE >						
D5502	8-719-084-47	DIODE 1SV290 (TPL3)				
D5503	8-719-988-61	DIODE 1SS355TE-17				

Note: Ferrite beads are mounted to the location where R5542, R5544 are printed. (TYPE C only)


The components identified by mark △ or dotted line with mark △ are critical for safety.
Replace only with part number specified.

DCR-TRV145E/TRV147E/TRV245E/TRV250E



PD-180 (TYPE S)

SI-035

Ref. No.	Part No.	Description
D5601	8-719-988-61	DIODE 1SS355TE-17
< IC >		
IC5501	8-752-102-40	IC CXA3592R-T4
IC5502	8-759-714-77	IC LZ9FF474
IC5601	8-759-564-49	IC TC7W53FU (TE12R)
IC5602	8-759-075-70	IC TA75S393F
< COIL >		
L5501	1-469-526-91	INDUCTOR 22uH
L5503	1-412-949-21	INDUCTOR 6.8uH
L5601	1-428-878-11	INDUCTOR 82uH
L5602	1-412-056-11	INDUCTOR 4.7uH
< TRANSISTOR >		
Q5502	6-550-232-01	TRANSISTOR 2SA2029T2LQ/R
Q5503	8-729-054-48	TRANSISTOR UP04601008S0
Q5504	8-729-054-48	TRANSISTOR UP04601008S0
Q5505	6-550-242-01	TRANSISTOR DTC114EMT2L
Q5601	6-550-234-01	TRANSISTOR UNR32A300LS0
Q5602	6-550-083-01	TRANSISTOR TPC6C01 (TE85R)
< RESISTOR >		
R5501	1-218-985-11	RES-CHIP 470K 5% 1/16W
R5503	1-208-933-11	METAL CHIP 82K 0.5% 1/16W
R5505	1-218-967-11	RES-CHIP 15K 5% 1/16W
R5506	1-218-958-11	RES-CHIP 2.7K 5% 1/16W
R5507	1-218-973-11	RES-CHIP 47K 5% 1/16W
R5508	1-218-975-11	RES-CHIP 68K 5% 1/16W
R5509	1-218-969-11	RES-CHIP 22K 5% 1/16W
R5510	1-218-975-11	RES-CHIP 68K 5% 1/16W
R5511	1-218-989-11	RES-CHIP 1M 5% 1/16W
R5512	1-218-977-11	RES-CHIP 100K 5% 1/16W
R5513	1-218-989-11	RES-CHIP 1M 5% 1/16W
R5515	1-218-990-11	SHORT CHIP 0
R5516	1-218-962-11	RES-CHIP 5.6K 5% 1/16W
R5519	1-218-990-11	SHORT CHIP 0
R5521	1-218-973-11	RES-CHIP 47K 5% 1/16W
R5522	1-218-957-11	RES-CHIP 2.2K 5% 1/16W
R5531	1-218-980-11	RES-CHIP 180K 5% 1/16W
R5532	1-218-973-11	RES-CHIP 47K 5% 1/16W
R5533	1-218-960-11	RES-CHIP 3.9K 5% 1/16W
R5534	1-218-990-11	SHORT CHIP 0
R5540	1-218-977-11	RES-CHIP 100K 5% 1/16W
R5541	1-218-977-11	RES-CHIP 100K 5% 1/16W
R5542	1-216-864-11	METAL CHIP 0 5% 1/16W
R5543	1-216-864-11	METAL CHIP 0 5% 1/16W
R5544	1-216-864-11	METAL CHIP 0 5% 1/16W
R5545	1-218-953-11	RES-CHIP 1K 5% 1/16W
R5602	1-218-977-11	RES-CHIP 100K 5% 1/16W
R5603	1-218-966-11	RES-CHIP 12K 5% 1/16W
R5606	1-218-969-11	RES-CHIP 22K 5% 1/16W
R5607	1-218-949-11	RES-CHIP 470 5% 1/16W
R5610	1-216-824-11	METAL CHIP 1.8K 5% 1/16W
< COMPOSITION CIRCUIT BLOCK >		
RB5501	1-234-372-21	RES, NETWORK 100 x4 (1005)

Ref. No.	Part No.	Description
RB5502	1-234-384-11	RES, NETWORK 1M x4 (1005)
RB5503	1-234-378-21	RES, NETWORK 10K x4 (1005)
RB5601	1-234-378-21	RES, NETWORK 10K x4 (1005)
< TRANSFORMER >		
 T5601	1-435-786-31	TRANSFORMER, INVERTER
A-7013-267-A SI-035 BOARD, COMPLETE		

(D752, D753, IC751, SE751 and SE752 are not included in this complete board.)		
< CAPACITOR >		
C751	1-104-847-11	TANTAL. CHIP 22uF 20% 4V
C752	1-104-847-11	TANTAL. CHIP 22uF 20% 4V
C755	1-115-566-11	CERAMIC CHIP 4.7uF 10% 10V
< CONNECTOR >		
CN751	1-816-232-11	PIN, CONNECTOR (PC BOARD) 4P
CN753	1-779-335-21	CONNECTOR, FFC/FPC 22P
CN754	1-779-327-11	CONNECTOR, FFC/FPC 6P
< DIODE >		
D752	8-719-060-65	DIODE DCC3810 (IR EMITTER)
D753	8-719-060-65	DIODE DCC3810 (IR EMITTER)
D754	8-719-064-07	DIODE SML-310LTT86 (TALLY)
< FERRITE BEAD >		
FB753	1-414-813-11	FERRITE 0uH
< IC >		
IC751	6-701-681-01	IC RPM7140-V4 (TRV245E/TRV250E)
< COIL >		
L751	1-419-353-21	INDUCTOR 10uH
< TRANSISTOR >		
Q751	6-550-091-01	TRANSISTOR 2SA2058 (TE85L)
Q752	8-729-028-26	TRANSISTOR 2SK1829 (TE85L)
Q753	8-729-023-22	TRANSISTOR 2SD2114K
< RESISTOR >		
R754	1-216-806-11	METAL CHIP 56 5% 1/10W
R755	1-216-806-11	METAL CHIP 56 5% 1/10W
R756	1-216-821-11	METAL CHIP 1K 5% 1/16W
R757	1-216-821-11	METAL CHIP 1K 5% 1/16W
R760	1-216-845-11	METAL CHIP 100K 5% 1/16W
R761	1-216-819-11	METAL CHIP 680 5% 1/16W
< SENSOR >		
SE751	1-803-042-31	SENSOR, ANGULAR VELOCITY (PITCH) (TRV245E/TRV250E)
SE752	1-803-042-41	SENSOR, ANGULAR VELOCITY (YAW) (TRV245E/TRV250E)

The components identified by mark  or dotted line with mark  are critical for safety.
Replace only with part number specified.

SI-035

VC-304

Ref. No.	Part No.	Description
		< VARISTOR >
VDR751	1-801-862-11	VARISTOR, CHIP (1608)
	A-7013-496-A	VC-304 BOARD, COMPLETE (SERVICE) (TRV145E/TRV147E)
	A-7013-498-A	VC-304 BOARD, COMPLETE (SERVICE) (TRV245E/TRV250E)

		< CAPACITOR >
C1001	1-100-252-11	CERAMIC CHIP 0.1uF 10% 6.3V
C1002	1-164-943-11	CERAMIC CHIP 0.01uF 10% 16V
C1301	1-125-777-11	CERAMIC CHIP 0.1uF 10% 10V
C1302	1-107-819-11	CERAMIC CHIP 0.022uF 10% 16V
C1303	1-125-777-11	CERAMIC CHIP 0.1uF 10% 10V
C1304	1-164-942-11	CERAMIC CHIP 0.0068uF 10% 16V
C1305	1-100-251-11	CERAMIC CHIP 0.047uF 10% 10V
C1307	1-125-777-11	CERAMIC CHIP 0.1uF 10% 10V
C1308	1-164-940-11	CERAMIC CHIP 0.0033uF 10% 16V
C1310	1-164-938-11	CERAMIC CHIP 0.0015uF 10% 50V
C1311	1-125-777-11	CERAMIC CHIP 0.1uF 10% 10V
C1312	1-125-837-91	CERAMIC CHIP 1uF 10% 6.3V
C1314	1-127-988-81	CERAMIC CHIP 15000PF 10% 16V
C1315	1-125-777-11	CERAMIC CHIP 0.1uF 10% 10V
C1316	1-127-988-81	CERAMIC CHIP 15000PF 10% 16V
C1317	1-164-943-11	CERAMIC CHIP 0.01uF 10% 16V
C1318	1-165-908-91	CERAMIC CHIP 1uF 10% 10V
C1320	1-109-982-11	CERAMIC CHIP 1uF 10% 10V
C1321	1-115-566-11	CERAMIC CHIP 4.7uF 10% 10V
C1322	1-115-566-11	CERAMIC CHIP 4.7uF 10% 10V
C1323	1-125-838-11	CERAMIC CHIP 2.2uF 10% 6.3V
C1324	1-127-861-11	CERAMIC CHIP 2.2uF 10% 16V
C1326	1-115-566-11	CERAMIC CHIP 4.7uF 10% 10V
C1327	1-127-861-11	CERAMIC CHIP 2.2uF 10% 16V
C1328	1-109-982-11	CERAMIC CHIP 1uF 10% 10V
C1329	1-115-566-11	CERAMIC CHIP 4.7uF 10% 10V
C1330	1-127-760-11	CERAMIC CHIP 4.7uF 10% 6.3V
C1331	1-115-566-11	CERAMIC CHIP 4.7uF 10% 10V
C1332	1-127-760-11	CERAMIC CHIP 4.7uF 10% 6.3V
C1333	1-127-760-11	CERAMIC CHIP 4.7uF 10% 6.3V
C1334	1-109-982-11	CERAMIC CHIP 1uF 10% 10V
C1335	1-164-505-11	CERAMIC CHIP 2.2uF 10% 16V
C1336	1-115-566-11	CERAMIC CHIP 4.7uF 10% 10V
C1337	1-115-566-11	CERAMIC CHIP 4.7uF 10% 10V
C1338	1-127-861-11	CERAMIC CHIP 2.2uF 10% 16V
C1339	1-115-566-11	CERAMIC CHIP 4.7uF 10% 10V
C1340	1-135-201-11	TANTALUM CHIP 10uF 20% 4V
C1341	1-125-827-91	CERAMIC CHIP 1uF 10% 25V
C1342	1-125-777-11	CERAMIC CHIP 0.1uF 10% 10V
C1343	1-135-259-11	TANTAL. CHIP 10uF 20% 6.3V
C1344	1-135-259-11	TANTAL. CHIP 10uF 20% 6.3V
C1345	1-135-259-11	TANTAL. CHIP 10uF 20% 6.3V
C1346	1-135-259-11	TANTAL. CHIP 10uF 20% 6.3V
C1347	1-135-259-11	TANTAL. CHIP 10uF 20% 6.3V
C1348	1-135-259-11	TANTAL. CHIP 10uF 20% 6.3V
C1349	1-119-750-11	TANTAL. CHIP 22uF 20% 6.3V
C1350	1-135-259-11	TANTAL. CHIP 10uF 20% 6.3V

Ref. No.	Part No.	Description
C1351	1-119-750-11	TANTAL. CHIP 22uF 20% 6.3V
C1352	1-125-777-11	CERAMIC CHIP 0.1uF 10% 10V
C1354	1-117-720-11	CERAMIC CHIP 4.7uF 10V
C1355	1-127-760-11	CERAMIC CHIP 4.7uF 10% 6.3V
C1356	1-164-506-11	CERAMIC CHIP 4.7uF 16V
C1357	1-164-505-11	CERAMIC CHIP 2.2uF 16V
C1358	1-164-505-11	CERAMIC CHIP 2.2uF 16V
C1371	1-137-710-11	CERAMIC CHIP 10uF 20% 6.3V
C1373	1-107-826-11	CERAMIC CHIP 0.1uF 10% 16V
C1390	1-127-760-11	CERAMIC CHIP 4.7uF 10% 6.3V
C1391	1-125-777-11	CERAMIC CHIP 0.1uF 10% 10V
C1501	1-164-858-11	CERAMIC CHIP 22PF 5% 50V
C1502	1-125-777-11	CERAMIC CHIP 0.1uF 10% 10V
C1503	1-164-858-11	CERAMIC CHIP 22PF 5% 50V
C1504	1-115-467-11	CERAMIC CHIP 0.22uF 10% 10V
C1507	1-127-760-11	CERAMIC CHIP 4.7uF 10% 6.3V
C1508	1-125-837-91	CERAMIC CHIP 1uF 10% 6.3V
C1509	1-164-937-11	CERAMIC CHIP 0.001uF 10% 50V
C1510	1-164-848-11	CERAMIC CHIP 8PF 0.50PF 50V
C1511	1-115-339-11	CERAMIC CHIP 0.1uF 10% 50V
C1512	1-164-937-11	CERAMIC CHIP 0.001uF 10% 50V
C1515	1-115-467-11	CERAMIC CHIP 0.22uF 10% 10V
C1516	1-162-970-11	CERAMIC CHIP 0.01uF 10% 25V
C1517	1-218-971-11	RES-CHIP 33K 5% 1/16W
C1518	1-125-837-91	CERAMIC CHIP 1uF 10% 6.3V
C1521	1-125-837-91	CERAMIC CHIP 1uF 10% 6.3V
C1522	1-125-837-91	CERAMIC CHIP 1uF 10% 6.3V
C1523	1-107-826-11	CERAMIC CHIP 0.1uF 10% 16V
C1524	1-104-847-11	TANTAL. CHIP 22uF 20% 4V
C1525	1-125-837-91	CERAMIC CHIP 1uF 10% 6.3V
C1526	1-125-777-11	CERAMIC CHIP 0.1uF 10% 10V
C1527	1-127-861-11	CERAMIC CHIP 2.2uF 10% 16V
C1530	1-125-837-91	CERAMIC CHIP 1uF 10% 6.3V
C1552	1-164-943-11	CERAMIC CHIP 0.01uF 10% 16V
C1554	1-164-941-11	CERAMIC CHIP 0.0047uF 10% 16V
C1556	1-127-760-11	CERAMIC CHIP 4.7uF 10% 6.3V
C1558	1-125-777-11	CERAMIC CHIP 0.1uF 10% 10V
C1559	1-107-826-11	CERAMIC CHIP 0.1uF 10% 16V
C1560	1-164-935-11	CERAMIC CHIP 470PF 10% 50V
C1561	1-164-943-11	CERAMIC CHIP 0.01uF 10% 16V
C1562	1-115-467-11	CERAMIC CHIP 0.22uF 10% 10V
C1563	1-165-708-11	ELECT 47uF 20% 6.3V
C1564	1-164-937-11	CERAMIC CHIP 0.001uF 10% 50V
C1565	1-117-863-11	CERAMIC CHIP 0.47uF 10% 6.3V
C1566	1-164-943-11	CERAMIC CHIP 0.01uF 10% 16V
C1568	1-164-939-11	CERAMIC CHIP 0.0022uF 10% 50V
C1571	1-127-760-11	CERAMIC CHIP 4.7uF 10% 6.3V
C1572	1-125-777-11	CERAMIC CHIP 0.1uF 10% 10V
C1573	1-164-937-11	CERAMIC CHIP 0.001uF 10% 50V
C1601	1-117-720-11	CERAMIC CHIP 4.7uF 10V
C2002	1-100-252-11	CERAMIC CHIP 0.1uF 10% 6.3V (TRV245E/RV250E)
C2005	1-100-251-11	CERAMIC CHIP 0.047uF 10% 10V (TRV245E/TRV250E)
C2007	1-100-251-11	CERAMIC CHIP 0.047uF 10% 10V (TRV245E/TRV250E)
C2008	1-110-666-11	ELECT CHIP 22uF 20% 6.3V (TRV245E/TRV250E)

DCR-TRV145E/TRV147E/TRV245E/TRV250E

VC-304

Ref. No.	Part No.	Description			
C2010	1-110-666-11	ELECT CHIP	22uF	20% 6.3V	(TRV245E/TRV250E)
C2016	1-127-760-11	CERAMIC CHIP	4.7uF	10% 6.3V	(TRV245E/TRV250E)
C2401	1-125-777-11	CERAMIC CHIP	0.1uF	10% 10V	
C2402	1-125-777-11	CERAMIC CHIP	0.1uF	10% 0V	
C2403	1-100-246-11	CERAMIC CHIP	0.001uF	10% 50V	
C2406	1-125-837-91	CERAMIC CHIP	1uF	10% 6.3V	
C2407	1-100-251-11	CERAMIC CHIP	0.047uF	10% 10V	
C2409	1-100-249-11	CERAMIC CHIP	0.01uF	10% 16V	
C2411	1-164-943-11	CERAMIC CHIP	0.01uF	10% 16V	
C2412	1-164-943-11	CERAMIC CHIP	0.01uF	10% 16V	
C2413	1-125-777-11	CERAMIC CHIP	0.1uF	10% 10V	
C2414	1-125-777-11	CERAMIC CHIP	0.1uF	10% 10V	
C2415	1-164-943-11	CERAMIC CHIP	0.01uF	10% 16V	
C2416	1-125-777-11	CERAMIC CHIP	0.1uF	10% 10V	
C2417	1-125-777-11	CERAMIC CHIP	0.1uF	10% 10V	
C2418	1-164-943-11	CERAMIC CHIP	0.01uF	10% 16V	
C2420	1-125-777-11	CERAMIC CHIP	0.1uF	10% 10V	
C2422	1-125-837-91	CERAMIC CHIP	1uF	10% 6.3V	
C2423	1-125-777-11	CERAMIC CHIP	0.1uF	10% 10V	
C2424	1-164-943-11	CERAMIC CHIP	0.01uF	10% 16V	
C2427	1-125-838-11	CERAMIC CHIP	2.2uF	10% 6.3V	
C2428	1-125-777-11	CERAMIC CHIP	0.1uF	10% 10V	
C2429	1-107-819-11	CERAMIC CHIP	0.022uF	10% 16V	
C2430	1-125-837-91	CERAMIC CHIP	1uF	10% 6.3V	
C2431	1-164-937-11	CERAMIC CHIP	0.001uF	10% 50V	
C2433	1-125-777-11	CERAMIC CHIP	0.1uF	10% 10V	
C2434	1-164-937-11	CERAMIC CHIP	0.001uF	10% 0V	
C2435	1-119-923-81	CERAMIC CHIP	0.047uF	10% 10V	
C2436	1-164-935-11	CERAMIC CHIP	470PF	10% 50V	
C2437	1-107-826-11	CERAMIC CHIP	0.1uF	10% 16V	
C2438	1-125-777-11	CERAMIC CHIP	0.1uF	10% 10V	
C2439	1-164-937-11	CERAMIC CHIP	0.001uF	10% 50V	
C2440	1-107-826-11	CERAMIC CHIP	0.1uF	10% 16V	
C2449	1-164-931-11	CERAMIC CHIP	100PF	10% 50V	
C2450	1-164-931-11	CERAMIC CHIP	100PF	10% 50V	
C3201	1-124-779-00	ELECT CHIP	10uF	20% 16V	
C3202	1-164-943-11	CERAMIC CHIP	0.01uF	10% 16V	
C3203	1-124-779-00	ELECT CHIP	10uF	20% 16V	
C3204	1-164-943-11	CERAMIC CHIP	0.01uF	10% 16V	
C3205	1-117-863-11	CERAMIC CHIP	0.47uF	10% 6.3V	
C3208	1-117-863-11	CERAMIC CHIP	0.47uF	10% 6.3V	
C3210	1-164-943-11	CERAMIC CHIP	0.01uF	10% 16V	
C3211	1-164-943-11	CERAMIC CHIP	0.01uF	10% 16V	
C3212	1-164-942-11	CERAMIC CHIP	0.0068uF	10% 16V	
C3213	1-164-942-11	CERAMIC CHIP	0.0068uF	10% 16V	
C3214	1-164-943-11	CERAMIC CHIP	0.01uF	10% 16V	
C3215	1-164-943-11	CERAMIC CHIP	0.01uF	10% 16V	
C3217	1-164-943-11	CERAMIC CHIP	0.01uF	10% 16V	
C3218	1-164-874-11	CERAMIC CHIP	100PF	5% 50V	
C3219	1-164-872-11	CERAMIC CHIP	82PF	5% 50V	
C3220	1-164-874-11	CERAMIC CHIP	100PF	5% 50V	
C3221	1-164-878-11	CERAMIC CHIP	150PF	5% 16V	
C3223	1-125-777-11	CERAMIC CHIP	0.1uF	10% 10V	
C3224	1-164-943-11	CERAMIC CHIP	0.01uF	10% 16V	
C3225	1-164-943-11	CERAMIC CHIP	0.01uF	10% 16V	
C3304	1-164-943-11	CERAMIC CHIP	0.01uF	10% 16V	

Ref. No.	Part No.	Description			
C3305	1-125-837-91	CERAMIC CHIP	1uF	10% 6.3V	
C3306	1-164-943-11	CERAMIC CHIP	0.01uF	10% 16V	
C3309	1-164-943-11	CERAMIC CHIP	0.01uF	10% 16V	
C3310	1-127-760-11	CERAMIC CHIP	4.7uF	10% 6.3V	
C3313	1-164-943-11	CERAMIC CHIP	0.01uF	10% 16V	
C3314	1-127-760-11	CERAMIC CHIP	4.7uF	10% 6.3V	
C3319	1-127-760-11	CERAMIC CHIP	4.7uF	10% 6.3V	
C3320	1-164-943-11	CERAMIC CHIP	0.01uF	10% 16V	
C3321	1-127-760-11	CERAMIC CHIP	4.7uF	10% 6.3V	
C3322	1-127-760-11	CERAMIC CHIP	4.7uF	10% 6.3V	
C3326	1-164-943-11	CERAMIC CHIP	0.01uF	10% 16V	
C3327	1-164-943-11	CERAMIC CHIP	0.01uF	10% 16V	
C3328	1-125-777-11	CERAMIC CHIP	0.1uF	10% 10V	
C3331	1-137-710-11	CERAMIC CHIP	10uF	20% 6.3V	
C3332	1-164-943-11	CERAMIC CHIP	0.01uF	10% 16V	
C3333	1-117-863-11	CERAMIC CHIP	0.47uF	10% 6.3V	
C3335	1-164-943-11	CERAMIC CHIP	0.01uF	10% 16V	
C3336	1-125-777-11	CERAMIC CHIP	0.1uF	10% 10V	
C3338	1-125-837-91	CERAMIC CHIP	1uF	10% 6.3V	
C3339	1-164-882-11	CERAMIC CHIP	220PF	5% 16V	
C3341	1-127-760-11	CERAMIC CHIP	4.7uF	10% 6.3V	
C3342	1-127-760-11	CERAMIC CHIP	4.7uF	10% 6.3V	
C3344	1-107-826-11	CERAMIC CHIP	0.1uF	10% 16V	
C3345	1-107-826-11	CERAMIC CHIP	0.1uF	10% 16V	
C3357	1-164-943-11	CERAMIC CHIP	0.01uF	10% 16V	
C4003	1-107-819-11	CERAMIC CHIP	0.022uF	10% 16V	
C4004	1-115-566-11	CERAMIC CHIP	4.7uF	10% 10V	
C4005	1-165-875-11	CERAMIC CHIP	10uF	10% 10V	
C4501	1-100-249-11	CERAMIC CHIP	0.01UF	10% 16V	
C4503	1-164-850-11	CERAMIC CHIP	10PF	0.50PF 50V	
C4504	1-164-850-11	CERAMIC CHIP	10PF	0.50PF 50V	
C4506	1-125-777-11	CERAMIC CHIP	0.1uF	10% 10V	
C4507	1-125-777-11	CERAMIC CHIP	0.1uF	10% 10V	
C4508	1-125-777-11	CERAMIC CHIP	0.1uF	10% 10V	
C4509	1-125-837-91	CERAMIC CHIP	1uF	10% 6.3V	
C4510	1-125-777-11	CERAMIC CHIP	0.1uF	10% 10V	
C4511	1-125-777-11	CERAMIC CHIP	0.1uF	10% 10V	
C4512	1-125-777-11	CERAMIC CHIP	0.1uF	10% 10V	
C4514	1-125-837-91	CERAMIC CHIP	1uF	10% 6.3V	
C4515	1-125-837-91	CERAMIC CHIP	1uF	10% 6.3V	
C4517	1-125-777-11	CERAMIC CHIP	0.1uF	10% 10V	
C4518	1-164-943-11	CERAMIC CHIP	0.01uF	10% 16V	(TRV245E/TRV250E)
C4518	1-218-977-11	RES-CHIP	100K	5% 1/16W	(Note) (TRV145E/TRV147E)
C4519	1-164-943-11	CERAMIC CHIP	0.01uF	10% 16V	(TRV245E/TRV250E)
C4519	1-218-977-11	RES-CHIP	100K	5% 1/16W	(Note) (TRV145E/TRV147E)
C4520	1-164-943-11	CERAMIC CHIP	0.01uF	10% 16V	
C5002	1-164-943-11	CERAMIC CHIP	0.01uF	10% 16V	
C5003	1-164-941-11	CERAMIC CHIP	0.0047uF	10% 16V	
C5004	1-125-777-11	CERAMIC CHIP	0.1uF	10% 10V	
C5005	1-164-856-81	CERAMIC CHIP	18PF	5% 50V	
C5006	1-100-249-11	CERAMIC CHIP	0.01uF	10% 16V	
C5008	1-164-856-81	CERAMIC CHIP	18PF	5% 50V	
C5009	1-125-777-11	CERAMIC CHIP	0.1uF	10% 10V	
C5010	1-124-778-00	ELECT CHIP	22uF	20% 6.3V	

Note: Resistors are mounted to the location where C4518, C4519 are printed. (TRV145E/TRV147E only)

Ref. No.	Part No.	Description			
C5401	1-124-779-00	ELECT CHIP	10uF	20%	16V
C5404	1-124-779-00	ELECT CHIP	10uF	20%	16V
C5405	1-117-863-11	CERAMIC CHIP	0.47uF	10%	6.3V
C5408	1-124-779-00	ELECT CHIP	10uF	20%	16V
C5409	1-127-760-11	CERAMIC CHIP	4.7uF	10%	6.3V
C5410	1-124-779-00	ELECT CHIP	10uF	20%	16V
C5411	1-124-779-00	ELECT CHIP	10uF	20%	16V
C5413	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C5414	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C5416	1-100-252-11	CERAMIC CHIP	0.1uF	10%	6.3V
C5418	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C5419	1-127-760-11	CERAMIC CHIP	4.7uF	10%	6.3V
C5420	1-117-863-11	CERAMIC CHIP	0.47uF	10%	6.3V
C5421	1-117-863-11	CERAMIC CHIP	0.47uF	10%	6.3V
C5422	1-125-837-91	CERAMIC CHIP	1uF	10%	6.3V
C5423	1-125-837-91	CERAMIC CHIP	1uF	10%	6.3V
C5424	1-104-847-11	TANTAL. CHIP	22uF	20%	4V
C5427	1-127-760-11	CERAMIC CHIP	4.7uF	10%	6.3V
C5430	1-127-760-11	CERAMIC CHIP	4.7uF	10%	6.3V
C5431	1-125-837-91	CERAMIC CHIP	1uF	10%	6.3V
C5433	1-125-837-91	CERAMIC CHIP	1uF	10%	6.3V
C5435	1-117-863-11	CERAMIC CHIP	0.47uF	10%	6.3V
C5436	1-117-863-11	CERAMIC CHIP	0.47uF	10%	6.3V
C5437	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C5438	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C5439	1-164-937-11	CERAMIC CHIP	0.001uF	10%	50V
C5440	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C5441	1-164-937-11	CERAMIC CHIP	0.001uF	10%	50V
C5442	1-117-863-11	CERAMIC CHIP	0.47uF	10%	6.3V
C5443	1-117-863-11	CERAMIC CHIP	0.47uF	10%	6.3V
C5445	1-135-158-21	TANTALUM CHIP	15uF	20%	4V
C5446	1-125-837-91	CERAMIC CHIP	1uF	10%	6.3V
C6501	1-127-760-11	CERAMIC CHIP	4.7uF	10%	6.3V
C6502	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C6504	1-137-710-11	CERAMIC CHIP	10uF	20%	6.3V
C6506	1-125-837-91	CERAMIC CHIP	1uF	10%	6.3V
C6507	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C6509	1-100-363-11	ELECT	220uF	20%	4V
C6510	1-124-778-00	ELECT CHIP	22uF	20%	6.3V
C6511	1-124-778-00	ELECT CHIP	22uF	20%	6.3V
C6512	1-100-363-11	ELECT	220uF	20%	4V
C7003	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C7004	1-100-249-11	CERAMIC CHIP	0.01uF	10%	16V
C7006	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C7008	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C7009	1-164-739-11	CERAMIC CHIP	560PF	5.00%	50V
C7010	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C7012	1-164-937-11	CERAMIC CHIP	0.001uF	10%	50V
C7013	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C7014	1-164-876-11	CERAMIC CHIP	120PF	5%	50V
C7015	1-125-837-91	CERAMIC CHIP	1uF	10%	6.3V
C7016	1-125-837-91	CERAMIC CHIP	1uF	10%	6.3V
C7017	1-125-837-91	CERAMIC CHIP	1uF	10%	6.3V
C7018	1-164-505-11	CERAMIC CHIP	2.2uF		16V
C7019	1-109-994-11	CERAMIC CHIP	2.2uF	10%	10V
C7020	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C7021	1-126-601-11	ELECT CHIP	2.2uF	20%	50V
C7022	1-135-201-11	TANTALUM CHIP	10uF	20%	4V

Ref. No.	Part No.	Description	
		< CONNECTOR >	
CN1001	1-815-763-11	CONNECTOR, FFC/FPC 24P	
CN1002	1-816-179-11	CONNECTOR, FFC/FPC (ZIF) 22P	
CN1003	1-794-998-31	PIN, CONNECTOR 20P	
CN1005	1-779-334-11	CONNECTOR, FFC/FPC 20P	
CN1007	1-779-333-11	CONNECTOR, FFC/FPC 18P	
CN1009	1-750-076-21	CONNECTOR, FFC/FPC 12P	
CN1011	1-766-346-21	CONNECTOR, FFC/FPC 16P	
CN1501	1-815-762-11	CONNECTOR, FFC/FPC 14P	
CN1551	1-750-360-21	CONNECTOR, FFC/FPC (ZIF) 24P	
* CN2401	1-580-055-21	PIN, CONNECTOR (SMD) 2P	
CN2402	1-766-646-21	CONNECTOR, FFC/FPC 10P	
CN2403	1-766-352-21	CONNECTOR, FFC/FPC 22P	
CN2404	1-766-345-21	CONNECTOR, FFC/FPC 15P	
CN3201	1-774-636-21	CONNECTOR, FFC/FPC 11P	
CN4001	1-573-806-21	PIN, CONNECTOR (1.5MM) (SMD) 6P	
		< DIODE >	
D1003	8-719-421-27	DIODE MA728	
D1005	6-500-289-01	DIODE MAZW082H0LS0	
D1006	6-500-289-01	DIODE MAZW082H0LS0	
D1007	6-500-289-01	DIODE MAZW082H0LS0	
D1008	6-500-289-01	DIODE MAZW082H0LS0	
D1009	6-500-314-01	DIODE DAN222MT2L	
D1011	6-500-507-01	DIODE TLAV1021 (T15SOY, F) (CHG)	
D1301	8-719-421-27	DIODE MA728	
D1302	6-500-314-01	DIODE DAN222MT2L	
D1303	8-719-081-19	DIODE 1SS383 (T5RSONY1)	
D1305	8-719-081-19	DIODE 1SS383 (T5RSONY1)	
D1306	8-719-081-19	DIODE 1SS383 (T5RSONY1)	
D1501	8-719-082-63	DIODE 1SV329 (TPL3)	
D1551	8-719-073-01	DIODE MA111- (K8).S0	
D4001	8-719-081-19	DIODE 1SS383 (T5RSONY1)	
D4002	6-500-289-01	DIODE MAZW082H0LS0	
D5001	8-719-073-01	DIODE MA111- (K8).S0	
D5003	8-719-073-01	DIODE MA111- (K8).S0	
D7001	8-719-084-47	DIODE 1SV290 (TPL3)	
		< FUSE >	
△ F001	1-576-406-21	FUSE (1.4A/32V)	
△ F002	1-576-406-21	FUSE (1.4A/32V)	
△ F003	1-576-406-21	FUSE (1.4A/32V)	
△ F004	1-576-406-21	FUSE (1.4A/32V)	
△ F005	1-576-406-21	FUSE (1.4A/32V)	
		< FERRITE BEAD >	
FB001	1-414-760-21	FERRITE	0uH
FB1501	1-414-760-21	FERRITE	0uH
FB1504	1-414-760-21	FERRITE	0uH
FB1601	1-414-760-21	FERRITE	0uH
FB2401	1-414-760-21	FERRITE	0uH
FB2402	1-500-283-11	FERRITE	0uH
FB2403	1-500-283-11	FERRITE	0uH
FB3301	1-414-760-21	FERRITE	0uH
FB3302	1-414-760-21	FERRITE	0uH
FB3303	1-414-760-21	FERRITE	0uH
FB3304	1-414-760-21	FERRITE	0uH

The components identified by mark △ or dotted line with mark △ are critical for safety.
Replace only with part number specified.

DCR-TRV145E/TRV147E/TRV245E/TRV250E

VC-304

Ref. No.	Part No.	Description	
FB4501	1-414-760-21	FERRITE	0uH
< IC >			
IC1001	6-703-227-01	IC TK11131CSCL-G	
IC1301	6-703-429-01	IC MB44A120APFV-G-BND-ERE1	
IC1302	6-703-228-01	IC TK11160CSCL-G	
IC1303	8-759-652-10	IC TK11119CSCL	
IC1501	8-752-417-16	IC CXD2444AR-T4	
IC1502	6-703-146-01	IC HD49337AFEB	
IC1503	8-759-387-31	IC TC75S55F (TE85R)	
IC1552	8-759-681-42	IC NJM12902V (TE2)	
IC1553	8-759-637-96	IC uPD16877MA-6A5-E2	
IC1601	6-702-155-01	IC BH2223FV-E2	
IC2001	8-759-489-19	IC uPC6756GR-8JG-E2 (TRV245E/TRV250E)	
IC2401	6-701-926-01	IC TB6550FG (EB)	
IC3201	8-752-106-95	IC CXA3619R-T4	
IC3301	8-752-418-16	IC CXD3164R	
IC3302	8-759-566-52	IC SN104266PN-TEB	
IC4501	6-802-549-01	IC MB91194APFF-G-129-BNDE1	
IC4502	6-702-156-01	IC AK6510CM-E2	
IC5001	6-802-540-01	IC MB89097PFV-G-146-BND-ER-E1	
IC5401	6-701-074-01	IC LA74207W-TBM-E	
IC5402	8-759-647-71	IC AK4550VT-E2	
IC6501	6-703-192-01	IC NJM2570V (TE2)	
IC7001	8-759-660-93	IC RB5P004AM1	
IC7002	8-752-405-57	IC CXD3501AR-T4	
< COIL >			
L1301	1-416-670-11	INDUCTOR	33uH
L1302	1-419-354-21	INDUCTOR	22uH
L1303	1-419-354-21	INDUCTOR	22uH
L1304	1-416-670-11	INDUCTOR	33uH
L1305	1-419-354-21	INDUCTOR	22uH
L1306	1-419-354-21	INDUCTOR	22uH
L1307	1-419-354-21	INDUCTOR	22uH
L1308	1-469-523-91	INDUCTOR	2.2uH
L1309	1-469-524-91	INDUCTOR	4.7uH
L1310	1-412-056-11	INDUCTOR	4.7uH
L1311	1-469-525-91	INDUCTOR	10uH
L1312	1-469-524-91	INDUCTOR	4.7uH
L1313	1-469-524-91	INDUCTOR	4.7uH
L1314	1-469-524-91	INDUCTOR	4.7uH
L1315	1-469-526-91	INDUCTOR	22uH
L1316	1-469-527-91	INDUCTOR	47uH
L1317	1-469-524-91	INDUCTOR	4.7uH
L1318	1-469-524-91	INDUCTOR	4.7uH
L1319	1-469-524-91	INDUCTOR	4.7uH
L1320	1-469-524-91	INDUCTOR	4.7uH
L1501	1-469-570-21	INDUCTOR	10uH
L1551	1-414-398-11	INDUCTOR	10uH
L1553	1-469-570-21	INDUCTOR	10uH
L2001	1-469-570-21	INDUCTOR	10uH (TRV245E/RV250E)
L3201	1-469-525-91	INDUCTOR	10uH
L3202	1-469-525-91	INDUCTOR	10uH
L3203	1-414-406-41	INDUCTOR	220uH
L3204	1-400-197-11	INDUCTOR	12uH
L3305	1-469-570-21	INDUCTOR	10uH
L3307	1-469-525-91	INDUCTOR	10uH

Ref. No.	Part No.	Description			
L3310	1-469-527-91	INDUCTOR	47uH		
L3313	1-469-570-21	INDUCTOR	10uH		
L3320	1-469-570-21	INDUCTOR	10uH		
L4001	1-412-056-11	INDUCTOR	4.7uH		
L5401	1-414-406-41	INDUCTOR	220uH		
L6501	1-469-525-91	INDUCTOR	10uH		
L7001	1-469-570-21	INDUCTOR	10uH		
L7002	1-469-891-21	INDUCTOR	6.8uH		
< LINE FILTER >					
LF4001	1-411-957-11	FILTER, COMMON MODE			
< TRANSISTOR >					
Q1305	6-550-408-01	TRANSISTOR	QS5U26TR		
Q1306	6-550-408-01	TRANSISTOR	QS5U26TR		
Q1307	6-550-408-01	TRANSISTOR	QS5U26TR		
Q1308	6-550-408-01	TRANSISTOR	QS5U26TR		
Q1309	6-550-408-01	TRANSISTOR	QS5U26TR		
Q1310	6-550-408-01	TRANSISTOR	QS5U26TR		
Q1311	6-550-407-01	TRANSISTOR	QS5U16TR		
Q1315	6-550-237-01	TRANSISTOR	2SC5658T2LQ/R		
Q1316	8-729-106-60	TRANSISTOR	2SB1115A		
Q1317	6-550-237-01	TRANSISTOR	2SC5658T2LQ/R		
Q1318	6-550-232-01	TRANSISTOR	2SA2029T2LQ/R		
Q1319	6-550-232-01	TRANSISTOR	2SA2029T2LQ/R		
Q1320	8-729-053-52	TRANSISTOR	HN1C01FE-Y/GR (TPLR3)		
Q1321	8-729-053-52	TRANSISTOR	HN1C01FE-Y/GR (TPLR3)		
Q1322	6-550-237-01	TRANSISTOR	2SC5658T2LQ/R		
Q1323	8-729-054-49	TRANSISTOR	UP04401008S0		
Q1324	6-550-237-01	TRANSISTOR	2SC5658T2LQ/R		
Q1325	8-729-054-49	TRANSISTOR	UP04401008S0		
Q1551	6-550-237-01	TRANSISTOR	2SC5658T2LQ/R		
Q1554	6-550-237-01	TRANSISTOR	2SC5658T2LQ/R		
Q1555	8-729-054-51	TRANSISTOR	UP04116008S0		
Q2401	6-550-237-01	TRANSISTOR	2SC5658T2LQ/R		
Q3202	8-729-054-48	TRANSISTOR	UP04601008S0		
Q3203	6-550-234-01	TRANSISTOR	UNR32A300LS0		
Q3204	6-550-232-01	TRANSISTOR	2SA2029T2LQ/R		
Q3205	8-729-047-19	TRANSISTOR	2SA1965-S-TL		
Q3303	6-550-383-01	TRANSISITOR	HN4A71FK (TE85R)		
Q3304	6-550-383-01	TRANSISITOR	HN4A71FK (TE85R)		
Q3307	6-550-239-01	TRANSISTOR	DTA144EMT2L		
Q4001	6-550-237-01	TRANSISTOR	2SC5658T2LQ/R		
Q4002	8-729-056-54	TRANSISTOR	TPCS8302 (TE12L)		
Q4003	8-729-106-60	TRANSISTOR	2SB1115A		
Q4004	6-550-234-01	TRANSISTOR	UNR32A300LS0		
Q4501	6-550-234-01	TRANSISTOR	UNR32A300LS0		
Q4502	6-550-237-01	TRANSISTOR	2SC5658T2LQ/R		
Q5001	8-729-041-43	TRANSISTOR	HN1L02FU (TE85R)		
Q5401	8-729-054-52	TRANSISTOR	UP04216008S0		
Q5403	6-550-240-01	TRANSISTOR	DTA114TMT2L		
Q5408	8-729-921-51	TRANSISTOR	2SD1834-T100		
< RESISTOR >					
R1003	1-218-949-11	RES-CHIP	470	5%	1/16W
R1004	1-218-953-11	RES-CHIP	1K	5%	1/16W
R1005	1-218-957-11	RES-CHIP	2.2K	5%	1/16W

Ref. No.	Part No.	Description				Ref. No.	Part No.	Description			
R1006	1-218-990-11	SHORT CHIP	0			R1526	1-218-983-11	RES-CHIP	330K	5%	1/16W
R1007	1-218-990-11	SHORT CHIP	0								
R1008	1-218-953-11	RES-CHIP	1K	5%	1/16W	R1528	1-218-990-11	SHORT CHIP	0		
R1018	1-218-990-11	SHORT CHIP	0			R1530	1-216-864-11	METAL CHIP	0	5%	1/16W
R1024	1-218-965-11	RES-CHIP	10K	5%	1/16W	R1551	1-218-973-11	RES-CHIP	47K	5%	1/16W
				(TRV145E/TRV147E)		R1556	1-218-953-11	RES-CHIP	1K	5%	1/16W
R1024	1-218-990-11	SHORT CHIP	0	(TRV245E/TRV250E)		R1560	1-208-635-11	RES-CHIP	10	5%	1/16W
R1025	1-218-977-11	RES-CHIP	100K	5%	1/16W						
				(TRV145E/TRV147E)		R1561	1-218-989-11	RES-CHIP	1M	5%	1/16W
R1027	1-218-964-11	RES-CHIP	8.2K	5%	1/16W	R1562	1-218-957-11	RES-CHIP	2.2K	5%	1/16W
R1029	1-218-955-11	RES-CHIP	1.5K	5%	1/16W	R1563	1-218-965-11	RES-CHIP	10K	5%	1/16W
R1031	1-218-990-11	SHORT CHIP	0			R1564	1-218-981-11	RES-CHIP	220K	5%	1/16W
R1301	1-218-961-11	RES-CHIP	4.7K	5%	1/16W	R1565	1-218-985-11	RES-CHIP	470K	5%	1/16W
R1302	1-218-953-11	RES-CHIP	1K	5%	1/16W						
R1303	1-220-200-81	RES-CHIP	30K	5%	1/16W	R1566	1-218-985-11	RES-CHIP	470K	5%	1/16W
R1306	1-218-961-11	RES-CHIP	4.7K	5%	1/16W	R1567	1-218-957-11	RES-CHIP	2.2K	5%	1/16W
R1307	1-218-970-11	RES-CHIP	27K	5%	1/16W	R1568	1-218-963-11	RES-CHIP	6.8K	5%	1/16W
R1308	1-218-971-11	RES-CHIP	33K	5%	1/16W	R1570	1-218-985-11	RES-CHIP	470K	5%	1/16W
R1309	1-218-963-11	RES-CHIP	6.8K	5%	1/16W	R1573	1-218-947-11	RES-CHIP	330	5%	1/16W
R1311	1-218-969-11	RES-CHIP	22K	5%	1/16W						
R1313	1-218-935-11	RES-CHIP	33	5%	1/16W	R1575	1-218-953-11	RES-CHIP	1K	5%	1/16W
R1314	1-218-953-11	RES-CHIP	1K	5%	1/16W	R1576	1-218-965-11	RES-CHIP	10K	5%	1/16W
R1315	1-218-953-11	RES-CHIP	1K	5%	1/16W	R1577	1-218-973-11	RES-CHIP	47K	5%	1/16W
R1316	1-208-709-11	METAL CHIP	12K	0.5%	1/16W	R2005	1-218-989-11	RES-CHIP	1M	5%	1/16W
										(TRV245E/TRV250E)	
R1317	1-218-967-11	RES-CHIP	15K	5%	1/16W	R2006	1-218-965-11	RES-CHIP	10K	5%	1/16W
R1318	1-218-978-11	METAL CHIP	120K	0.5%	1/16W					(TRV245E/TRV250E)	
R1319	1-208-715-11	METAL CHIP	22K	0.5%	1/16W						
R1321	1-218-990-11	SHORT CHIP	0			R2007	1-218-965-11	RES-CHIP	10K	5%	1/16W
R1325	1-218-990-11	SHORT CHIP	0							(TRV245E/TRV250E)	
						R2008	1-218-989-11	RES-CHIP	1M	5%	1/16W
R1336	1-218-966-11	RES-CHIP	12K	5%	1/16W					(TRV245E/TRV250E)	
R1337	1-218-977-11	RES-CHIP	100K	5%	1/16W	R2401	1-218-973-11	RES-CHIP	47K	5%	1/16W
R1338	1-218-973-11	RES-CHIP	47K	5%	1/16W	R2402	1-218-983-11	RES-CHIP	330K	5%	1/16W
R1339	1-218-973-11	RES-CHIP	47K	5%	1/16W	R2403	1-218-949-11	RES-CHIP	470	5%	1/16W
R1340	1-218-977-11	RES-CHIP	100K	5%	1/16W						
						R2404	1-218-946-11	RES-CHIP	270	5%	1/16W
R1342	1-218-977-11	RES-CHIP	100K	5%	1/16W	R2418	1-218-965-11	RES-CHIP	10K	5%	1/16W
R1343	1-218-977-11	RES-CHIP	100K	5%	1/16W	R2419	1-216-789-11	METAL CHIP	2.2	5%	1/16W
R1344	1-218-961-11	RES-CHIP	4.7K	5%	1/16W	R2421	1-216-789-11	METAL CHIP	2.2	5%	1/16W
R1345	1-218-969-11	RES-CHIP	22K	5%	1/16W	R2422	1-216-789-11	METAL CHIP	2.2	5%	1/16W
R1346	1-218-969-11	RES-CHIP	22K	5%	1/16W						
						R2423	1-218-971-11	RES-CHIP	33K	5%	1/16W
R1347	1-218-977-11	RES-CHIP	100K	5%	1/16W	R2424	1-218-990-11	SHORT CHIP	0		
R1348	1-208-715-11	METAL CHIP	22K	0.5%	1/16W	R2428	1-218-965-11	RES-CHIP	10K	5%	1/16W
R1349	1-218-963-11	RES-CHIP	6.8K	5%	1/16W	R2431	1-218-961-11	RES-CHIP	4.7K	5%	1/16W
R1350	1-208-707-11	METAL CHIP	10K	0.5%	1/16W	R2434	1-216-808-11	METAL CHIP	82	5%	1/16W
R1351	1-208-935-11	METAL CHIP	100K	0.5%	1/16W						
						R3210	1-208-715-11	METAL CHIP	22K	0.5%	1/16W
R1352	1-208-721-11	METAL CHIP	39K	0.5%	1/16W	R3212	1-208-709-11	METAL CHIP	12K	0.5%	1/16W
R1353	1-208-908-11	METAL CHIP	7.5K	0.5%	1/16W	R3214	1-220-196-11	METAL CHIP	13K	0.5%	1/16W
R1354	1-208-935-11	METAL CHIP	100K	0.5%	1/16W	R3216	1-208-701-11	METAL CHIP	5.6K	0.5%	1/16W
R1355	1-218-965-11	RES-CHIP	10K	5%	1/16W	R3218	1-208-715-11	METAL CHIP	22K	0.5%	1/16W
R1356	1-208-943-11	METAL CHIP	220K	0.5%	1/16W						
						R3219	1-208-715-11	METAL CHIP	22K	0.5%	1/16W
R1357	1-218-990-11	SHORT CHIP	0			R3220	1-218-971-11	RES-CHIP	33K	5%	1/16W
R1358	1-208-943-11	METAL CHIP	220K	0.5%	1/16W	R3221	1-218-945-11	METAL CHIP	220	0.5%	1/16W
R1359	1-208-931-11	METAL CHIP	68K	0.5%	1/16W	R3222	1-218-945-11	METAL CHIP	220	0.5%	1/16W
R1503	1-218-977-11	RES-CHIP	100K	5%	1/16W	R3223	1-218-945-11	METAL CHIP	220	0.5%	1/16W
R1509	1-218-989-11	RES-CHIP	1M	5%	1/16W						
						R3224	1-218-945-11	METAL CHIP	220	0.5%	1/16W
R1512	1-218-985-11	RES-CHIP	470K	5%	1/16W	R3225	1-218-946-11	RES-CHIP	270	5%	1/16W
R1521	1-218-937-11	RES-CHIP	47	5%	1/16W	R3226	1-218-945-11	RES-CHIP	220	5%	1/16W
R1523	1-218-990-11	SHORT CHIP	0			R3227	1-218-957-11	RES-CHIP	2.2K	5%	1/16W
R1525	1-218-985-11	RES-CHIP	470K	5%	1/16W	R3228	1-218-961-11	RES-CHIP	4.7K	5%	1/16W
						R3229	1-218-941-81	RES-CHIP	100	5%	1/16W
						R3230	1-218-938-11	RES-CHIP	56	5%	1/16W
						R3231	1-218-950-11	RES-CHIP	560	5%	1/16W

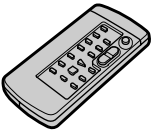
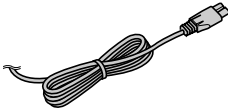
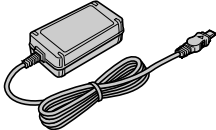
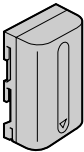
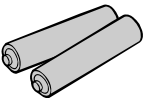
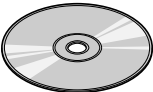
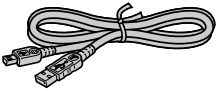
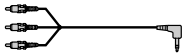
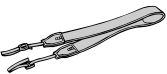
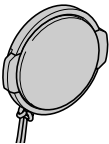


VC-304

Ref. No.	Part No.	Description			
R3307	1-218-990-11	SHORT CHIP	0		
R3313	1-208-707-11	METAL CHIP	10K	0.5%	1/16W
R3314	1-208-707-11	METAL CHIP	10K	0.5%	1/16W
R3315	1-218-965-11	RES-CHIP	10K	5%	1/16W
R3316	1-218-961-11	RES-CHIP	4.7K	5%	1/16W
R3326	1-208-677-11	METAL CHIP	560	0.5%	1/16W
R3330	1-208-677-11	METAL CHIP	560	0.5%	1/16W
R3332	1-208-675-11	METAL CHIP	470	0.5%	1/16W
R3335	1-208-677-11	METAL CHIP	560	0.5%	1/16W
R3342	1-218-990-11	SHORT CHIP	0		
R3343	1-218-951-11	RES-CHIP	680	5%	1/16W
R3350	1-218-946-11	RES-CHIP	270	5%	1/16W
R3353	1-208-709-11	METAL CHIP	12K	0.5%	1/16W
R3356	1-208-709-11	METAL CHIP	12K	0.5%	1/16W
R3361	1-218-864-11	METAL CHIP	5.1K	0.5%	1/16W
R3362	1-216-295-91	SHORT CHIP	0		
R3363	1-216-295-91	SHORT CHIP	0		
R3364	1-216-295-91	SHORT CHIP	0		
R3365	1-218-955-11	RES-CHIP	1.5K	5%	1/16W
R3369	1-218-990-11	SHORT CHIP	0		
R3370	1-218-990-11	SHORT CHIP	0		
R3379	1-218-990-11	SHORT CHIP	0		
R3392	1-218-990-11	SHORT CHIP	0		
R3393	1-218-990-11	SHORT CHIP	0		
R3395	1-218-990-11	SHORT CHIP	0		
R3397	1-218-990-11	SHORT CHIP	0		
R3398	1-218-990-11	SHORT CHIP	0		
R4001	1-218-953-11	RES-CHIP	1K	5%	1/16W
R4006	1-218-977-11	RES-CHIP	100K	5%	1/16W
R4007	1-218-989-11	RES-CHIP	1M	5%	1/16W
R4008	1-216-797-11	METAL CHIP	10	5%	1/16W
R4009	1-218-954-11	RES-CHIP	1.2K	5%	1/16W
R4010	1-218-963-11	RES-CHIP	6.8K	5%	1/16W
R4501	1-218-941-81	RES-CHIP	100	5%	1/16W
R4502	1-218-965-11	RES-CHIP	10K	5%	1/16W
R4503	1-218-977-11	RES-CHIP	100K	5%	1/16W
R4504	1-218-965-11	RES-CHIP	10K	5%	1/16W
R4506	1-218-977-11	RES-CHIP	100K	5%	1/16W
R4507	1-218-977-11	RES-CHIP	100K	5%	1/16W
R4508	1-218-953-11	RES-CHIP	1K	5%	1/16W
R4509	1-218-953-11	RES-CHIP	1K	5%	1/16W
R4510	1-218-973-11	RES-CHIP	47K	5%	1/16W
R4512	1-218-985-11	RES-CHIP	470K	5%	1/16W
R4514	1-218-953-11	RES-CHIP	1K	5%	1/16W
R4519	1-218-977-11	RES-CHIP	100K	5%	1/16W
R4524	1-218-953-11	RES-CHIP	1K	5%	1/16W
R4530	1-218-958-11	METAL CHIP	2.7K	0.5%	1/16W
R4531	1-208-707-11	METAL CHIP	10K	0.5%	1/16W
R4532	1-218-977-11	RES-CHIP	100K	5%	1/16W
R4533	1-218-977-11	RES-CHIP	100K	5%	1/16W
R4536	1-218-973-11	RES-CHIP	47K	5%	1/16W
R4537	1-218-977-11	RES-CHIP	100K	5%	1/16W
R5015	1-218-973-11	RES-CHIP	47K	5%	1/16W
R5016	1-208-935-11	METAL CHIP	100K	0.5%	1/16W
R5017	1-218-989-11	METAL CHIP	1M	0.5%	1/16W
R5018	1-218-961-11	RES-CHIP	4.7K	5%	1/16W
R5019	1-219-570-11	METAL CHIP	10M	5%	1/10W

Ref. No.	Part No.	Description			
R5020	1-218-985-11	METAL CHIP	470K	0.5%	1/16W
R5021	1-208-927-11	METAL CHIP	47K	0.5%	1/16W
R5022	1-218-990-11	SHORT CHIP	0		
R5023	1-218-953-11	RES-CHIP	1K	5%	1/16W
R5027	1-218-989-11	RES-CHIP	1M	5%	1/16W
R5034	1-218-949-11	RES-CHIP	470	5%	1/16W
R5051	1-218-977-11	RES-CHIP	100K	5%	1/16W
R5052	1-218-990-11	SHORT CHIP	0		
R5403	1-218-961-11	RES-CHIP	4.7K	5%	1/16W
R5407	1-218-973-11	RES-CHIP	47K	5%	1/16W
R5416	1-218-957-11	RES-CHIP	2.2K	5%	1/16W
R5417	1-218-974-11	RES-CHIP	56K	5%	1/16W
R5418	1-218-977-11	RES-CHIP	100K	5%	1/16W
R5421	1-218-953-11	RES-CHIP	1K	5%	1/16W
R5422	1-218-953-11	RES-CHIP	1K	5%	1/16W
R5429	1-218-955-11	RES-CHIP	1.5K	5%	1/16W
R5430	1-218-955-11	RES-CHIP	1.5K	5%	1/16W
R5431	1-218-951-11	RES-CHIP	680	5%	1/16W
R5432	1-218-951-11	RES-CHIP	680	5%	1/16W
R5435	1-218-962-11	RES-CHIP	5.6K	5%	1/16W
R5436	1-218-962-11	RES-CHIP	5.6K	5%	1/16W
R6507	1-208-715-11	METAL CHIP	22K	0.5%	1/16W
R6508	1-218-990-11	SHORT CHIP	0		
R6509	1-218-965-11	RES-CHIP	10K	5%	1/16W
R7003	1-218-985-11	RES-CHIP	470K	5%	1/16W
R7006	1-218-967-11	RES-CHIP	15K	5%	1/16W
R7007	1-218-958-11	RES-CHIP	2.7K	5%	1/16W
R7008	1-218-973-11	RES-CHIP	47K	5%	1/16W
R7009	1-218-975-11	RES-CHIP	68K	5%	1/16W
R7010	1-218-969-11	RES-CHIP	22K	5%	1/16W
R7011	1-218-975-11	RES-CHIP	68K	5%	1/16W
R7012	1-218-989-11	RES-CHIP	1M	5%	1/16W
R7013	1-218-977-11	RES-CHIP	100K	5%	1/16W
R7016	1-208-927-11	METAL CHIP	47K	0.5%	1/16W
R7019	1-208-927-11	METAL CHIP	47K	0.5%	1/16W
R7020	1-218-989-11	METAL CHIP	1M	0.5%	1/16W
R7046	1-218-949-11	RES-CHIP	470	5%	1/16W
< COMPOSITION CIRCUIT BLOCK >					
RB1003	1-234-378-21	RES, NETWORK 10K x4 (1005)			
RB1004	1-234-375-21	RES, NETWORK 1K x4 (1005)			
RB1551	1-234-379-21	RES, NETWORK 22K x4 (1005)			
RB1552	1-234-375-21	RES, NETWORK 1K x4 (1005)			
RB2001	1-234-379-21	RES, NETWORK 22K x4 (1005)			(TRV245E/TRV250E)
RB2401	1-234-378-21	RES, NETWORK 10K x4 (1005)			
RB3201	1-234-379-21	RES, NETWORK 22K x4 (1005)			
RB3303	1-234-714-11	RES, NETWORK 56 x4 (1005)			
RB3304	1-234-377-21	RES, NETWORK 4.7K x4 (1005)			
RB3305	1-234-376-21	RES, NETWORK 2.2K x4 (1005)			
RB3307	1-234-714-11	RES, NETWORK 56 x4 (1005)			
RB4501	1-234-381-21	RES, NETWORK 100K x4 (1005)			
RB4507	1-234-377-21	RES, NETWORK 4.7K x4 (1005)			(TRV245E/TRV250E)
RB4508	1-234-378-21	RES, NETWORK 10K x4 (1005)			
RB4509	1-234-381-21	RES, NETWORK 100K x4 (1005)			
RB4510	1-234-381-21	RES, NETWORK 100K x4 (1005)			
RB4511	1-234-375-21	RES, NETWORK 1K x4 (1005)			

<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>
RB4512	1-234-384-11	RES, NETWORK 1M x4 (1005)
RB4513	1-234-381-21	RES, NETWORK 100K x4 (1005)
RB4514	1-234-381-21	RES, NETWORK 100K x4 (1005)
RB5001	1-234-375-21	RES, NETWORK 1K x4 (1005)
RB5002	1-234-375-21	RES, NETWORK 1K x4 (1005)
RB5006	1-234-375-21	RES, NETWORK 1K x4 (1005)
RB5007	1-234-375-21	RES, NETWORK 1K x4 (1005)
RB5008	1-234-375-21	RES, NETWORK 1K x4 (1005)
RB5009	1-234-383-21	RES, NETWORK 470K x4 (1005)
RB5011	1-234-381-21	RES, NETWORK 100K x4 (1005)
RB5012	1-234-378-21	RES, NETWORK 10K x4 (1005)
RB5401	1-234-381-21	RES, NETWORK 100K x4 (1005)
RB5402	1-234-375-21	RES, NETWORK 1K x4 (1005)
RB6501	1-234-702-11	RES, NETWORK 68 x4 (1005)
RB7005	1-234-372-21	RES, NETWORK 100 x4 (1005)
RB7006	1-234-381-21	RES, NETWORK 100K x4 (1005)
< VARISTOR >		
VDR001	1-803-974-21	VARISTOR, CHIP (1608)
VDR002	1-803-974-21	VARISTOR, CHIP (1608)
VDR003	1-803-974-21	VARISTOR, CHIP (1608)
VDR004	1-803-974-21	VARISTOR, CHIP (1608)
VDR005	1-803-974-21	VARISTOR, CHIP (1608)
< VIBRATOR >		
X1501	1-767-586-11	VIBRATOR, CRYSTAL (27MHz)
X4501	1-760-655-41	VIBRATOR, CRYSTAL (20MHz)
X5001	1-795-244-11	VIBRATOR, CERAMIC (10MHz)
X5002	1-760-458-21	VIBRATOR, CRYSTAL (32.768kHz)

Checking supplied accessories.

			
Wireless Remote Commander (1) RMT-814 1-475-141-61 Battery case lid (for RMT-814) 3-742-854-01	Mains lead (1) △ 1-575-131-11 (AEP, EE, NE, E) △ 1-696-819-21 (AUS) △ 1-783-374-11 (UK) △ 1-782-476-11 (CH) △ 1-790-732-11 (JE)	AC-L15A/L15B AC Adaptor (1) △ 1-477-533-31 (EXCEPT CH) △ 1-477-533-41 (CH)	NP-FM30 battery pack (1) A-7096-388-B
			
R6 (Size AA) battery for Remote Commander (2) (TRV245E/TRV250E)	CD-ROM (SPVD-010 USB Driver) (1) 3-078-942-01 (TRV245E/TRV250E)	USB cable (1) 1-823-931-11 (TRV245E/TRV250E)	A/V connecting cable (STEREO) (1) 1-824-097-11
		Other accessories 3-079-468-13 OPERATING INSTRUCTIONS (ENGLISH, FRENCH) (TRV145E: AEP, UK/TRV147E: AEP, UK, E, AUS/ TRV245E: AEP, UK/TRV250E: AEP, UK, E, AUS, CH, JE) 3-079-468-23 OPERATING INSTRUCTIONS (SPANISH, PORTUGUESE) (TRV145E: AEP/TRV147E: AEP/ TRV245E: AEP/TRV250E: AEP) 3-079-468-33 OPERATING INSTRUCTIONS (ITALIAN, GREECE) (TRV145E: AEP/TRV147E: AEP/ TRV245E: AEP/TRV250E: AEP) 3-079-468-43 OPERATING INSTRUCTIONS (GERMAN, DUTCH) (TRV145E: AEP/TRV147E: AEP/ TRV245E: AEP/TRV250E: AEP) 3-079-468-53 OPERATING INSTRUCTIONS (RUSSIAN, SWEDISH) (TRV145E: NE/TRV147E: NE, E/ TRV245E: NE/TRV250E: NE, E, JE) 3-079-468-63 OPERATING INSTRUCTIONS (FINISH, DANISH) (TRV145E: NE/TRV147E: NE/TRV245E: NE/TRV250E: NE) 3-079-468-73 OPERATING INSTRUCTIONS (POLISH, CZECH) (TRV145E: EE/TRV147E: EE/TRV245E: EE/TRV250E: EE) 3-079-468-83 OPERATING INSTRUCTIONS (SLOVAKIAN, HUNGARIAN) (TRV145E: EE/TRV147E: EE/TRV245E: EE/TRV250E: EE) 3-079-468-93 OPERATING INSTRUCTIONS (ARABIC, PERUSSIAN) (TRV147E: E/TRV250E: E) 3-079-469-23 OPERATING INSTRUCTIONS (SIMPLIFIED CHINESE) (TRV147E: E/TRV250E: E, CH, JE)	
			
21-pin adaptor (1) 1-770-783-21 (AEP, UK, EE, NE)	Adaptor, conversion 2P △ 1-569-008-12 (E) △ 1-569-007-12 (JE)		

The components identified by mark △ or dotted line with mark △ are critical for safety.
Replace only with part number specified.

Revision History

Ver.	Date	History	Contents	S.M. Rev. issued
1.0	2003.02	Official Release	—	—